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Water Withdrawals in Illinois, 1982

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ABSTRACT

This report, part of a cooperative program with the U. S. Geological Survey, summarizes the results of the 1982 Illinois Water Inventory Program. Water use data are presented for the following categories: Public Water Supply (1739.8 mgd), Self-Supplied Industry (32,215.7 mgd), Rural Water (265.9 mgd), and Fish and Wildlife Management Areas (26.9 mgd). The data are then further categorized by counties, districts, hydrologic units, major aquifer systems, and Standard Metropolitan Statistical Areas.

Illinois water withdrawals during 1982 were 33,248.3 mgd, of which ground water provided 985.3 mgd and surface water sources supplied 32,263.0 mgd. The largest user of water in Illinois is electric power generation, 91.6 percent of the total withdrawals. Excluding electric power withdrawals, 1982 ground-water use was 975.6 mgd, and surface water use was 1825.6 mgd.

INTRODUCTION

Illinois has been considered a water excess state. The state, in a sense, is surrounded by fresh water with the Mississippi River on its western border, the Ohio and Wabash Rivers to the south and east, and Lake Michigan on the northeast. Within the interior the large tributaries to these major water systems are the Illinois, Kaskaskia, Rock, Sangamon, Embarras, and Kankakee Rivers. They are the principal surface water sources in the state. In addition the state has abundant ground-water resources; but these water resources are finite and are not distributed uniformly.

It is necessary to document current water uses to permit planning and proper management of Illinois' existing water resources. To this end, the Illinois State Water Survey, in cooperation with the U.S. Geological Survey, has expanded water use inventory activities to include all areas of the state and all water sources. This data collection system is intended to document the state's total water use; assist in coordinating the management of ground-water resources in

the northeastern part of the state, where a major ground-water resource system is currently being "mined" (withdrawn faster than recharge); expedite the exchange of water use information to the benefit of other state agencies; complement resource research and studies with the capability to rapidly aggregate various regional water use patterns; and facilitate planning the most effective use of Illinois water resources for the economic and social well-being of the people of Illinois and the rest of the nation.

This report is the third summary of water withdrawals throughout Illinois; the other reports were Illinois State Water Survey Circulars 140 and 152.^{1,2} It was anticipated to be part of a continuous water use inventory program which would not only show changes in quantities of water used, but would also indicate trends in use and provide the basic data required for establishing water budgets, developing water use plans, and evaluating hydrologic unit and aquifer systems.

Previous Studies

Since the early 1940s, the Illinois State Water Survey has become increasingly involved in evaluating the use of the water resources of Illinois. Most of the previous reports on water use have emphasized the regions where water resources are extensively developed or have surveyed withdrawal by a major user category. Appendix A lists these reports.

Present Study

This report presents the results of the 1982 Illinois Water Inventory Program. It summarizes water withdrawals by major use categories from ground water and surface water sources in Illinois during 1982 and compares selected data from previous publications with the 1982 data.

Information on the quantity of water withdrawn for use in Illinois was obtained from many sources during the inventory. The data are presented by the following categories: Public Water Supply; Self-Supplied Industry—thermoelectric and hydroelectric power generation, manufacturing, and mineral extraction; Rural Use—domestic, livestock, and irrigation; and Fish and Wildlife Management Areas. The water use data in this report are then further categorized by counties, districts, hydrologic units, major aquifer systems, and Standard Metropolitan Statistical Areas

(SMSA). For the SMSA's data are also reported by township. Information concerning drainage district transfers and non-withdrawal uses such as navigation and water-based recreation was not collected.

Acknowledgments

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Acknowledgment is also made to the numerous individuals and organizations who have generously contributed information incorporated into this report. A special expression of gratitude is extended to the staff of the public and industrial water supply systems for reporting their annual pumpage in response to a mail questionnaire. Representatives of the Illinois Bureau of the Budget provided population data and projections. John W. Brother, Jr., supervised preparation of the illustrations.

WATER WITHDRAWALS

Terminology

When the term "water use" appears in this report, withdrawal use (the amount of water withdrawn from its source) is implied. This is equivalent to "intake" or "water requirement" as used in industry and agriculture, respectively. The principal requisite for withdrawal use is that water must be taken from a ground water or surface water source and conveyed to the place of use. If the water is used more than once by recycling, it will do the work of a greater quantity of water; the amount of this greater quantity, which is commonly called the "gross water use," is not evaluated in this report. If, however, the water is returned to a stream, lake, aquifer, or other source and then withdrawn anew, the summation of successive withdrawals gives the "total or cumulative withdrawal" use.

The Illinois "public water supplies" are defined as systems or wells that furnish water for drinking or general domestic use in incorporated municipalities, or in unincorporated communities where 15 or more separate lots or properties, or 25 persons, are being served or are intended to be served at least 60 days per year. Public water supplies serve domestic, commercial, and industrial users.

If a public supply is either not available or not used, the water is "self-supplied." Individual families and small communities not served by a public water supply system are categorized as "rural" with regard to water use. Industries and commercial establishments using their own water source facilities are categorized as "self-supplied industry."

Water used to generate hydroelectric power is also included as a withdrawal use in this report because of its diversion through power plants. The term "non-

withdrawal uses" encompasses all uses taking place within the river channel itself. Non-withdrawal uses are not included in this report.

Water withdrawal data are reported as the average daily quantities, usually derived from the annual use. The use is expressed in million gallons per day. Common equivalents are given in table 1.

Table 1. Hydraulic Equivalents
(Equivalent values, to three significant figures,
are on the same horizontal line)

<i>Million gallons per day</i>	<i>Billion gallons per day</i>	<i>Thousand acre-feet per year</i>	<i>Thousand cubic feet per second</i>	<i>Thousand gallons per minute</i>	<i>Million cubic meters per day</i>
1.0	0.001	1.12	0.00155	0.694	0.00379
1000	1.0	1120	1.55	694	3.79
0.893	0.000893	1.0	0.00138	0.620	0.00338
646	0.646	724	1.0	449	2.45
1.44	0.00144	1.61	0.00223	1.0	0.00545
264	0.264	296	0.409	184	1.0

Geographic Areas

When the term "district" is used in this report, it is synonymous with Climatological Divisions of the National Oceanic and Atmospheric Administration and the Crop Reporting Districts (figure 1) of the Illinois Cooperative Crop Reporting Service.³ These districts represent divisions with similar climate, soils, and types of farming.

"Major aquifer systems" is used to identify ground-water sources and includes sand and gravel, Mississippian-Pennsylvanian, Silurian-Devonian, and Cambrian-Ordovician.

"Hydrologic unit" in the text refers to one of the 12 Hydrologic Accounting Units of the U.S. Geological Survey's Hydrologic Unit Map of 1974 for Illinois.⁴ This map, prepared by the USGS in cooperation with the U.S. Water Resources Council, delineates the boundaries of major U.S. river basins to help standardize the collection and dissemination of water data. A distinct eight-digit code has been assigned to each river basin.

Standard Metropolitan Statistical Areas are integrated economic and social units with a large volume of daily travel and communication between the central city having 50,000 population or more and outlying parts of the area. Each area consists of one or more whole counties which, though primarily residential in character, contribute significantly to the labor force of the industrial counties and are socially and economically integrated with the central city (figure 1). These areas were defined by the Federal Committee on Standard Metropolitan Statistical Areas of the Office of Management and Budget for general

purpose use throughout the federal government in presenting economic and social data.⁵

Public Water Supply Use

The total water withdrawal in 1982 for public water supply systems was 1739.8 mgd (see table 9 in Appendix B), a 2.2 percent decrease from 1980. Surface water furnished 1273.9 mgd while ground water supplied 465.8 mgd.

Public water supplies furnish potable water to 90 percent of the state's population (11.522 million), about 10.315 million people.⁶ Surface water supplies about 6.639 million people, while ground water supplies about 4.675 million people. This leaves about 1.208 million people, about 10 percent, to furnish their own supply of potable water.

Public water supply withdrawals were computed from a mail canvass of all the public water supplies listed by the Illinois Environmental Protection Agency Water Supply Division. Those public water supplies that did not respond to mail and telephone follow-up were estimated using the latest data available.

Water use data were obtained for almost 1900 public water systems. The largest system, in terms of population served, is the Chicago Department of Water and Sewers, Bureau of Water, serving more than 4.5 million people. The Chicago system pumped 950.4 mgd from Lake Michigan in 1982, a 1.0 percent decrease from 1980. The largest area served by the public water system is the Rend Lake Conservancy District. Reaching into parts of nine counties—Franklin, Jackson, Jefferson, Hamilton, Marion, Perry, Saline, Washington, and Williamson—the Conservancy District serves an area of more than 1800 square miles and pumped 13.3 mgd from Rend Lake in 1982, a 7.3 percent increase from 1980.

Self-Supplied Industry Water Use

Nearly all the self-supplied industry in Illinois can be divided into four major classifications: thermoelectric power generation, hydroelectric power generation, manufacturing, and mineral extraction. In 1982 the total self-supplied industrial water withdrawals (see table 14) were 31,215.7 mgd (including the 21,894.4 mgd diverted through the hydroelectric turbines). Surface water supplied 30,967.1 mgd; ground-water sources provided 248.6 mgd. Excluding water used for thermoelectric and hydroelectric generation, water used by self-supplied industry was 768.7 mgd (see table 13).

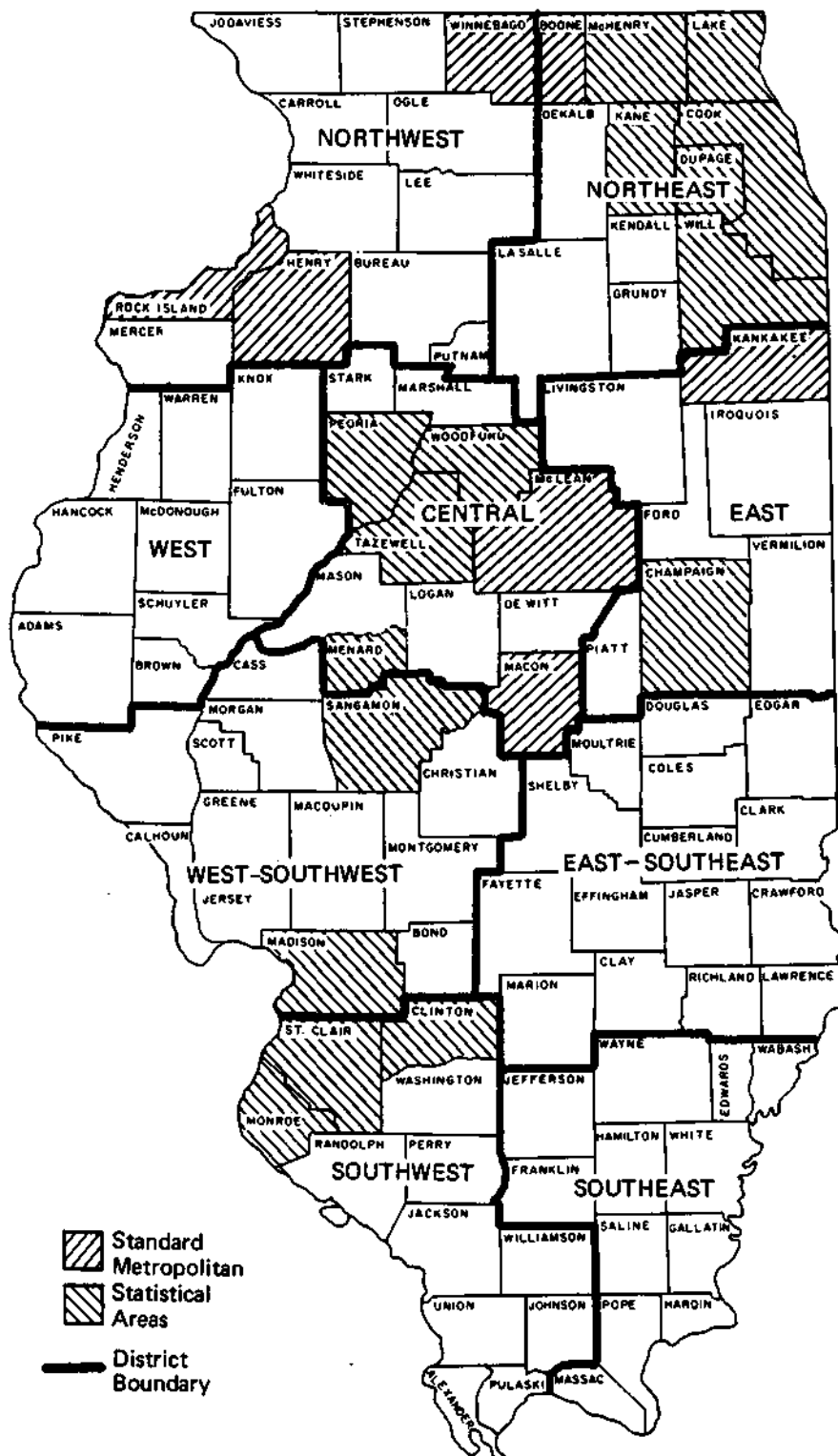


Figure 1. District and SMSA boundaries

Industrial self-supplied water withdrawals were identified from a 1979 mail canvass of more than 4700 industries in the state. More than 800 self-supplied industries were canvassed for 1982 water withdrawals.

Follow-up was by a second mailing, and then by telephone. Those industrial withdrawals not accounted for either by questionnaire return or telephone contact were estimated using the latest data available.

The electric power generation industry is the largest user of water in the state, accounting for 91.6 percent of the total water use and 97.5 percent of the self-supplied industry water use. This industry withdraws about 30.0 billion gallons of water a day (see table 10), but more than 99.9 percent of this water is returned to its source with only an increase in temperature.

Thermoelectric Power Generation

The water withdrawn for steam electric power generation was 8552.7 mgd in 1982, shown in table 2. The state has 34 commercial thermoelectric (steam turbine) stations; the majority of these stations are coal fired. Four stations have a total of eight nuclear reactors providing heat energy for the boilers. By 1986, six more nuclear reactors are scheduled to be producing electricity.

Table 2. Historic Water Use for Electric Power Generation

	<i>Thermoelectric mgd</i>	<i>Hydroelectric mgd</i>
1950-1951	5,927	20,694
1960	9,051.3	21,155
1964-1965	9,120.3	
1970	8,744.9	
1978	19,918.7	22,593.0
1980	14,060.6	25,570.1
1981	10,088	25,975
1982	8,552.7	21,894.4

Table 3. Hydroelectric Plants in Illinois, 1982

<i>Plant</i>	<i>Water</i>	<i>Normal head (ft)</i>	<i>Installed capacity (kw)</i>	<i>Average flow through turbines (mgd)</i>
Lockport	DesPlaines River	38	19,900	1,415
Marseilles	Illinois River	15	2,024	1,274
Dayton	Fox River	32	3,680	681
Rockton	Rock River	11	1,100	600
Moline	Mississippi River	12	3,600	801
Keokuk	Mississippi River	32	121,600	17,123*
Total Average Flow				21,894

*One-half flow credited to Illinois

Hydroelectric Power Generation

In 1982, 21,894.4 mgd of surface water were diverted through the six remaining low head hydroelectric stations in Illinois, including one-half of the hydroelectric diversion on the Mississippi River along the border with Iowa (table 3). The Keokuk station uses 78.2 percent of this water or about 40 percent of the Mississippi River flow.

Manufacturing

Self-supplied withdrawal by manufacturing during 1982 totaled 641.1 mgd. Surface water supplied 470.5 mgd while ground water supplied 170.6 mgd (see table 11). Manufacturing is defined as those industries listed under "Division D, Manufacturing" in the Standard Industrial Classification Manual-1972.⁷

The water withdrawal data of the 20 major manufacturing groups, according to the Standard Industrial Classification (SIC) system, were examined and are presented in table 4. The range of water withdrawals was large, with the primary metals industries surpassing all others. Four self-supplied, major industry groups withdraw about 84 percent of the total. They are the primary metals industries (329.7 mgd), petroleum and coal products (84.0 mgd), chemical and allied industries (77.1 mgd), and food and kindred products (50.0 mgd).

The three-digit SIC system was used for grouping in examining the water withdrawal data for specific self-supplied manufacturers. On the basis of selecting only those specific groups which withdraw water at a rate of more than 5.0 mgd, 17 self-supplied specific groups were selected and are given in table 5. These 17 specific manufacturing groups account for about 90 percent of the total self-supporting manufacturing withdrawal. Ground water makes up 21 percent of the withdrawal, 122.6 mgd, while surface water makes up the other 79 percent, 450.9 mgd.

Mineral Extraction

Water withdrawals by the mineral extraction industries during 1982 totaled 87.3 mgd. Surface water supplied 43.4 mgd while ground water supplied 43.9 mgd (see table 12). Oil field brine made up 35.3 mgd of this ground water.⁸ Most of the brine was injected into the oil-producing formations in water-flooding operations. Most of the surface water is recirculated through its source many times, while being used in product preparation or washing. This practice leads to large cumulative withdrawals for the mineral extraction industries.

Table 4. Water Withdrawals by Self-Supplied Industry, Manufacturing, by Major SIC Group, 1982

Major SIC group	Manufacturing groups	Withdrawals (mgd)		Total
		Ground- water	Surface water	
20	Food and kindred products	22.5	27.5	50.0
21	Tobacco manufacturers	0	0	0
22	Textile and mill products	.7	0	.7
23	Apparel and fabric products	<.05	0	<.05
24	Lumber and wood products	.1	0	.1
25	Furniture and fixtures	.2	14.2	14.4
26	Paper and allied products	8.9	9.4	18.3
27	Printing, publishing, allied industries	.3	1.2	1.5
28	Chemical and allied industries	29.6	47.5	77.1
29	Petroleum and coal products	52.5	31.5	84.0
30	Rubber and plastic products	8.2	0	8.2
31	Leather and leather products	0	0	0
32	Stone, clay, and glass	5.4	11.2	16.6
33	Primary metals industries	19.5	310.2	329.7
34	Fabricated metal products	7.7	2.9	10.6
35	Machinery (except electrical)	5.1	13.4	18.5
36	Electrical and electronics	3.3	1.4	4.7
37	Transportation equipment	.3	0	.3
38	Instruments and related products	6.4	0	6.4
39	Misc. manufacturing industries	0	0	0
	Totals	170.6	470.5	641.1

Table 5. Water Withdrawals by Self-Supplied Industry, Manufacturing, by Specific SIC Group, 1982

Specific SIC group		Withdrawals (mgd)		Total
		Ground- water	Surface water	
204	Grain mill products	4.4	26.7	31.1
207	Fats and oils	7.5	.4	7.9
251	Household furniture	0	14.2	14.2
262	Paper mills	1.6	5.8	7.4
281	Industrial inorganic chemicals	10.4	14.4	24.8
283	Drugs	3.9	11.6	15.5
286	Industrial organic chemicals	2.7	7.1	9.8
287	Agricultural chemicals	3.6	13.1	16.7
289	Misc. chemical products	5.9	1.3	7.2
291	Petroleum refining	52.2	20.9	73.2
299	Misc. oil and coal products	.2	10.6	10.7
307	Plastic products	5.8	0	5.8
321	Flat glass	.4	7.3	7.7
331	Steel rolling and finishing	13.7	289.8	303.5
332	Iron and steel foundries	4.0	19.9	23.9
352	Farm and garden machinery	.3	8.8	9.1
386	Photographic equipment and supplies	6.0	0	6.0
	Totals	122.6	450.9	574.5

The major minerals industries in Illinois are fluorspar mining, quarrying, sand and gravel operations, oil production, and coal mining. Their rates of withdrawal are shown in table 6.

Table 6. Water Withdrawals by Major Mineral Extraction Industries, 1982

Mineral	Ground water (mgd)	Surface water (mgd)	Total (mgd)
Fluorspar	1.6	0.1	1.7
Quarrying	0.1	1.8	1.9
Sand & Gravel	0.7	11.3	12.0
Coal	1.5	25.8	27.3
Oil	40.0*	1.4	41.4*

*Including 35.3 mgd brine

Rural Water Use

For the purpose of this report, rural water use (withdrawals) is divided into three classifications: domestic, livestock, and irrigation. While the amount of water withdrawn for rural uses is small (about 0.8 percent) when compared with the other withdrawal uses in Illinois, rural withdrawals have increased from an estimated 81 mgd in 1970⁹ and 101 mgd in 1975¹⁰ to an estimated 265.9 mgd during 1982 (see table 15).

There has been no attempt during this study to break down the rural water use estimate into ground-water and surface water sources. Because of the small amount of rural use compared with other withdrawal categories, and the knowledge that most of these withdrawals are from ground water, rural water use is reported as ground-water withdrawals in table 17 and is not shown in table 18.

Domestic

Rural domestic use for 1982 was estimated to be 95.0 mgd. The rural domestic use was computed by multiplying the population in each county that is not served by public water supplies by the district per capita water use. The district per capita water use was derived by averaging the per capita water use of all public water supply systems serving fewer than 800 persons and less than two commercial connections but located outside SMSA's. The district rural domestic per capita use ranged from 63.8 gallons per day (gpd) in the Central District to 89.1 in the Northwest District (figure 2).

Livestock

Water withdrawals for livestock use in 1982 were estimated to be 41.5 mgd. The water use estimates for livestock are based on a fixed amount of water use per head, for each type of animal. County livestock populations were provided by the annual Illinois agricultural census.³ Daily consumption rates (table 7) provided the basis for these calculations.

Table 7. Livestock Water Requirements

Livestock	Water use (gpd)
Milk cows	35
Horse, mule, cattle	12
Hog	4
Sheep	2
Chicken	0.06
Turkey	0.12

From references 11, 12, and 13

Irrigation

Average annual irrigation withdrawals for 1982 were estimated to be 129.3 mgd. Most of this water is applied during the months of June, July, and August. The water use estimates for irrigation are based upon a University of Illinois Agricultural Engineering 1977 survey of irrigation in Illinois.¹⁴ This was updated with the help of the U of I Agricultural Engineering Department and the State Water Survey Northern Regional Office. Estimates of water withdrawals for irrigation were based upon county rainfall and the number of acres irrigated.

There has been a substantial increase in the acreage of agricultural lands irrigated since 1950, from 9000 acres¹⁵ to an estimated 165,000 acres in 1982. Total acreage (including golf courses, cemeteries, etc.) under irrigation was estimated to be 227,800 acres.

Fish and Wildlife Management Areas Water Use

The Illinois Department of Conservation, U.S. Fish and Wildlife Service, and the U.S. Forest Service reported water withdrawals within their management areas to be 26.9 mgd in 1982. Most of the water was used to flood portions of water fowl areas during the fall migration. Surface water made up 21.9 mgd of the withdrawals, with ground water providing the other 5.0 mgd (see tables 17 and 18).

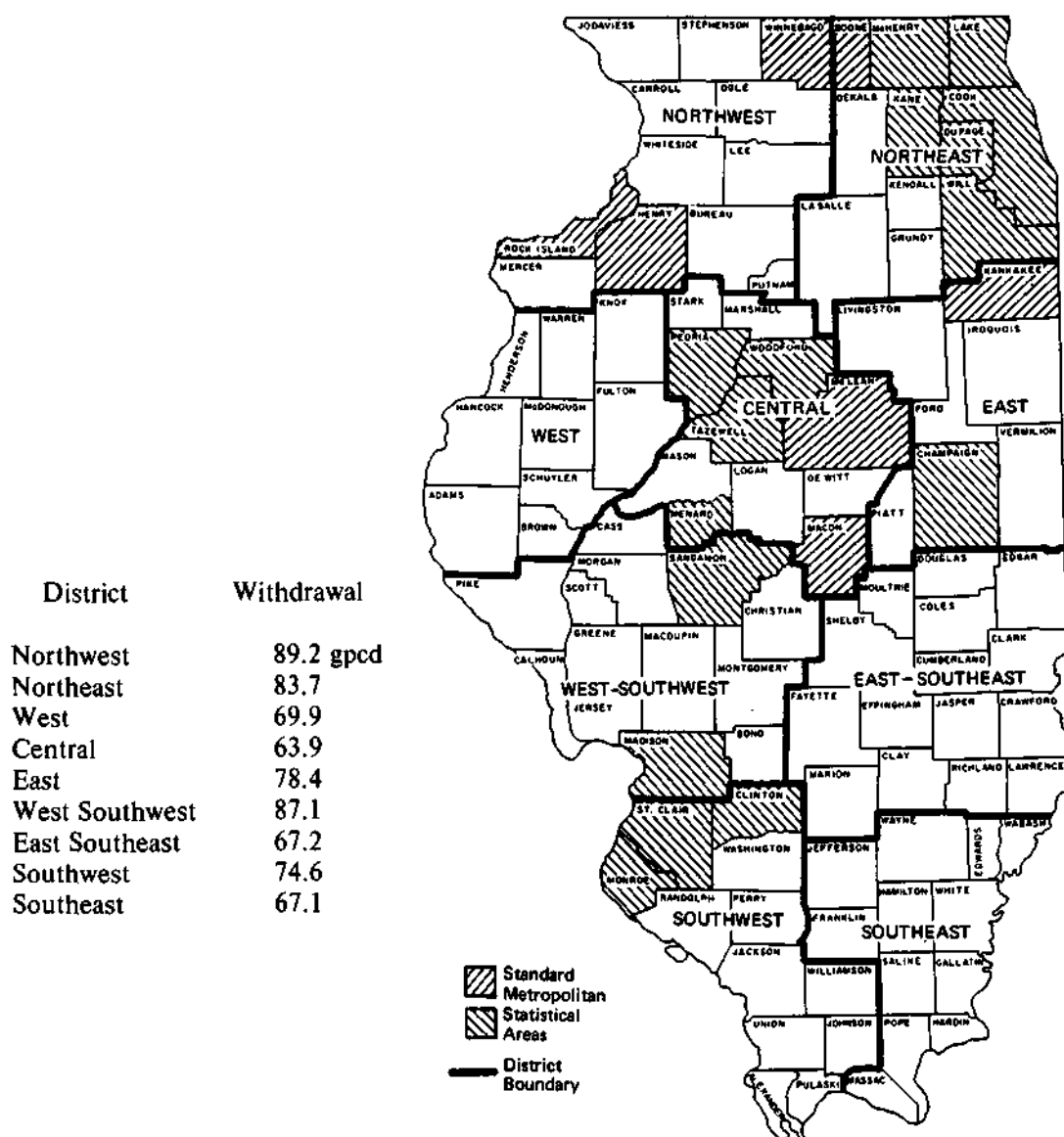


Figure 2. District rural domestic per capita water use, 1982

Hydrologic Basin Surface Water Use

For the purpose of having a standard framework for detailed water and related land resources planning, the state has been divided into 12 major hydrologic units by the U.S. Geological Survey.⁴ Generally, these units are concomitant with the watershed boundaries for major river systems in Illinois (figures 3 and 4). Total surface water (including lakes and ponds) withdrawals within the units (figure 4) ranged from 2.1 mgd in the Mississippi River drainage above Lock and Dam 13 (Unit 070600) to 17,955.3 mgd in the Mississippi River drainage basin upstream from the mouth of the Des Moines River to

Lock and Dam 13 (Unit 070801).

Major Geohydrologic System Water Use

Withdrawals from ground water during 1982 were estimated to be 985.3 mgd. For this report, ground-water use except rural domestic has been broken down into 4 major geohydrologic systems. Withdrawals in 1982 from these systems were: Sand and Gravel, 408.1 mgd; Mississippian-Pennsylvanian, 43.7 mgd; Silurian-Devonian, 117.3 mgd; and Cambrian-Ordovician, 277.2 mgd (table 19). For the SMSA's, data are also reported by township and major aquifer system (table 20).

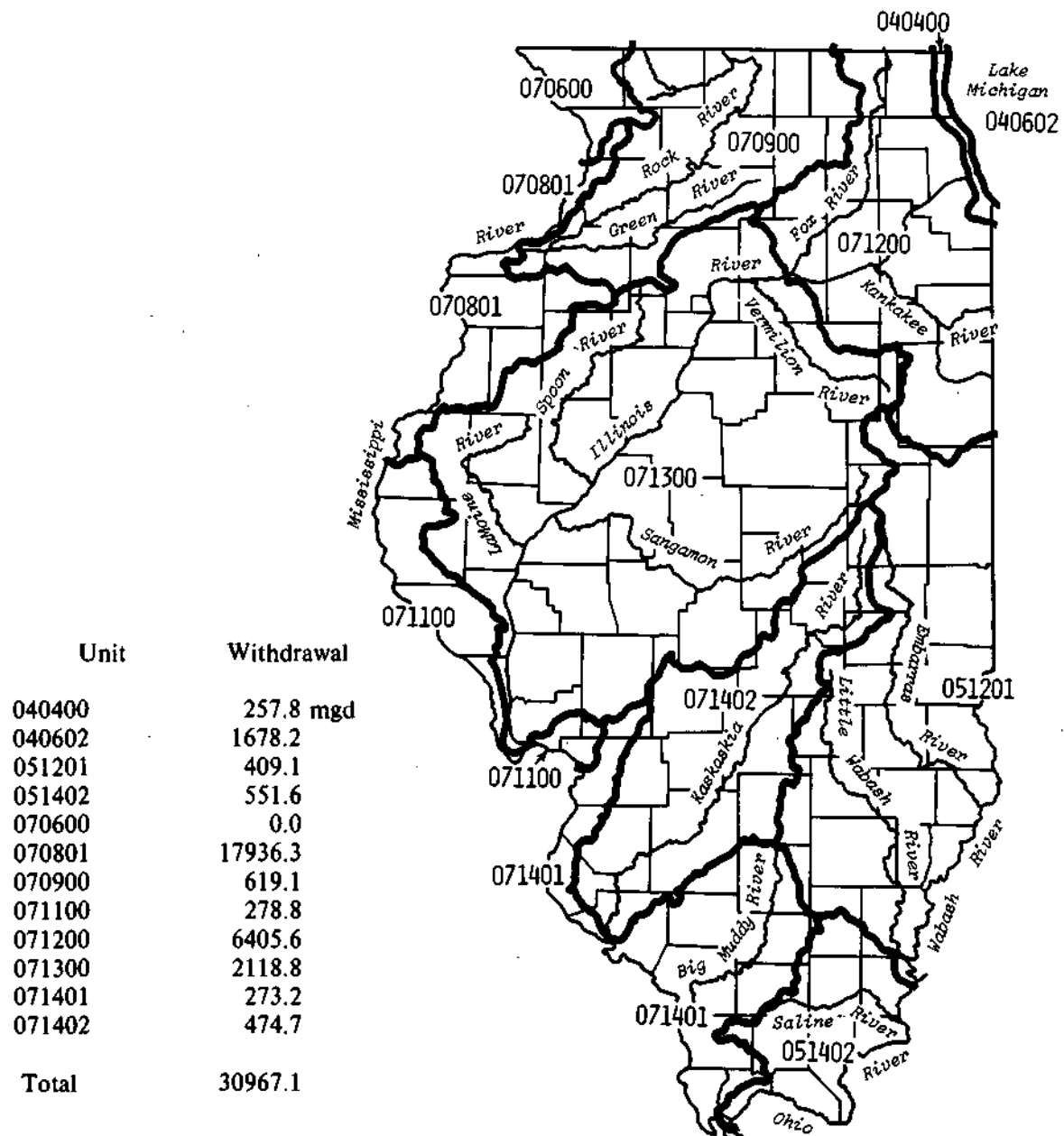


Figure 3. Surface water withdrawals by self-supplied industry, by hydrologic units, 1982

SUMMARY OF ILLINOIS WATER USE

Total accounted water withdrawals in Illinois during 1982 were 33,248.3 mgd (see table 16). Surface water accounted for 32,263.0 mgd and ground water supplied 985.3 mgd (see tables 17 and 18). The water withdrawals by each category are given in table 8.

Standard Metropolitan Statistical Areas account for

28 percent, 9028.9 mgd, of the total water use in the state. The SMSA's also have 24 percent, 7379.3 mgd, of the state's self-supplied industrial withdrawals (see table 21). Excluding the electric power industry withdrawals, SMSA's account for 75 percent, 579.4 mgd, of the water use in the state (see table 22).

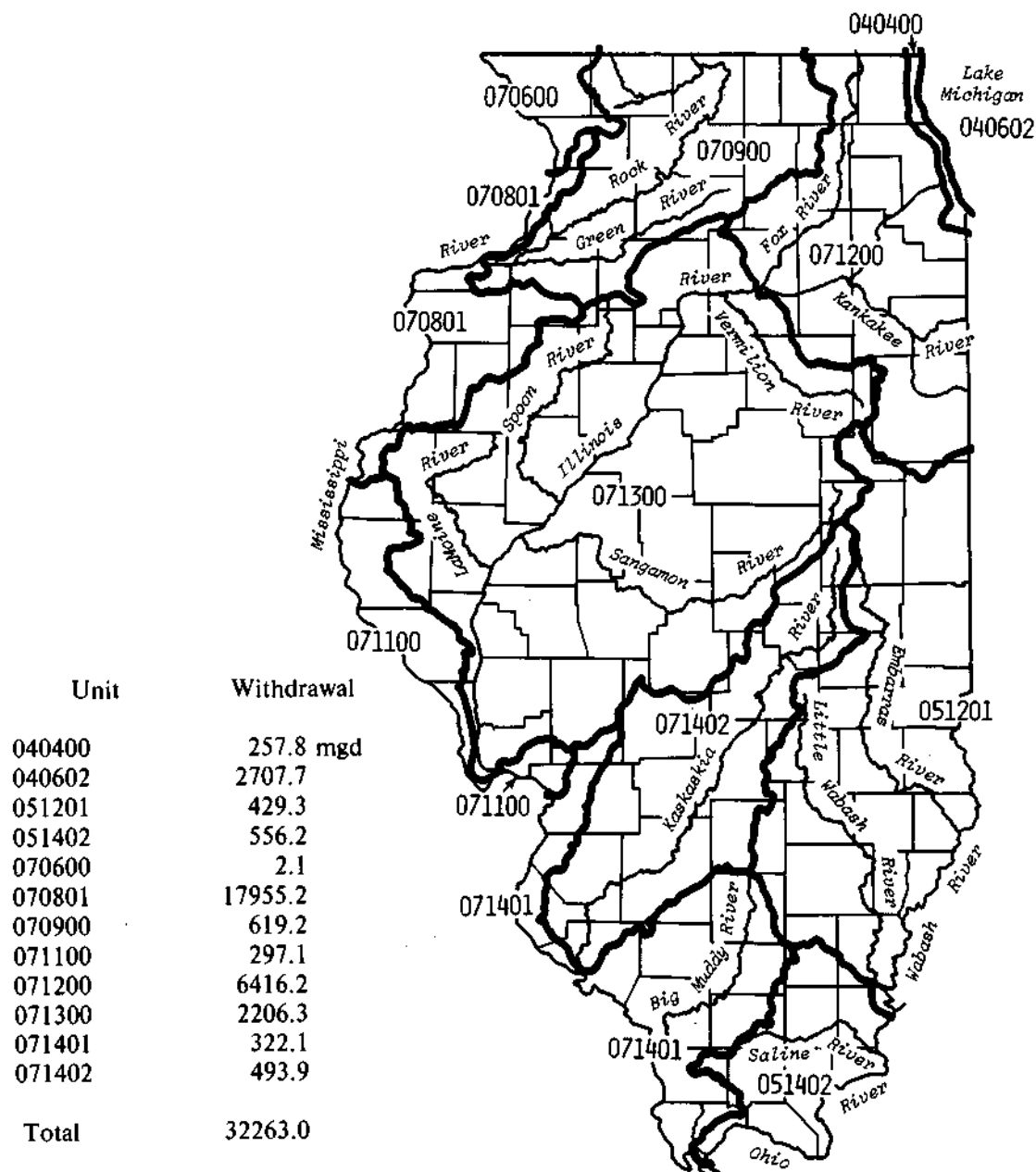


Figure 4. Surface water withdrawals by hydrologic units, 1982

Table 8. Summary of Total Water Withdrawals, 1982

Category	Ground water	Surface water	Total
Public Systems	465.8	1273.9	1739.8
Self-supplied Industry	248.6	30967.1	31215.7
Rural	265.9*	+	265.9
Fish and Wildlife	5.0	21.9	26.9
Total	985.3	32263.0	33248.3

*See page 7

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APPENDIX B

Table 9. Public Water Systems Withdrawals, 1982

<i>District County</i>	<i>Groundwater (mgd)</i>	<i>Surface water (mgd)</i>	<i>Total (mgd)</i>
Northwest			
006 Bureau	3.444	0	3.444
008 Carroll	1.404	0	1.404
037 Henry	4.136	0	4.136
043 Jo Daviess	2.730	0	2.730
052 Lee	3.323	0	3.323
066 Mercer	.900	0	.900
071 Ogle	5.395	0	5.395
078 Putnam	.455	0	.455
081 Rock Island	2.726	18.270	20.996
089 Stephenson	5.632	0	5.632
098 Whiteside	4.495	0	4.495
101 Winnebago	32.300	0	32.300
<i>District total</i>	<i>66.940</i>	<i>18.270</i>	<i>85.210</i>
Northeast			
004 Boone	3.377	0	3.377
016 Cook	85.167	995.163	1080.330
019 DeKalb	7.158	0	7.158
022 DuPage	72.358	0	72.358
032 Grundy	2.183	0	2.183
045 Kane	32.147	0	32.147
047 Kendall	1.637	0	1.637
049 Lake	14.660	34.295	48.955
050 LaSalle	10.947	0	10.947
056 McHenry	10.861	0	10.861
099 Will	30.002	0	30.002
<i>District total</i>	<i>270.498</i>	<i>1029.458</i>	<i>1299.956</i>
West			
001 Adams	1.892	6.232	8.124
005 Brown	.058	.015	.073
029 Fulton	.990	1.545	2.536
034 Hancock	.221	1.122	1.343
036 Henderson	6.352	0	6.352
048 Knox	1.348	0	1.348
055 McDonough	.675	2.985	3.660
085 Schuyler	.430	0	.430
094 Warren	2.684	0	2.684
<i>District total</i>	<i>14.650</i>	<i>11.899</i>	<i>26.549</i>
Central			
020 DeWitt	1.551	0	1.551
054 Logan	3.335	0	3.335
057 McLean	4.653	6.486	11.138
058 Macon	1.038	23.323	24.361
062 Marshall	1.171	0	1.171
063 Mason	1.061	0	1.061
065 Menard	.704	0	.704
072 Peoria	16.645	6.689	23.334
088 Stark	.409	0	.409
090 Tazewell	12.874	.316	13.190
102 Woodford	1.586	1.460	3.046
<i>District total</i>	<i>45.026</i>	<i>38.274</i>	<i>83.299</i>
East			
010 Champaign	18.241	0	18.241
027 Ford	1.450	0	1.450
038 Iroquois	1.931	0	1.931
046 Kankakee	1.736	10.075	11.811
053 Livingston	1.581	4.702	6.283
074 Piatt	.958	0	.958
092 Vermilion	1.341	8.314	9.655
<i>District total</i>	<i>27.237</i>	<i>23.091</i>	<i>50.329</i>

Table 9. (Concluded)

<i>District County</i>	<i>Groundwater (mgd)</i>	<i>Surface water (mgd)</i>	<i>Total (mgd)</i>
W. Southwest			
003 Bond	.064	.876	.940
007 Calhoun	.324	0	.324
009 Cass	1.267	.119	1.386
011 Christian	1.291	.722	2.013
031 Greene	.365	.286	.650
042 Jersey	.838	0	.838
059 Macoupin	.019	3.625	3.645
060 Madison	9.982	45.769	55.751
068 Montgomery	.586	2.089	2.675
069 Morgan	.088	1.842	1.930
075 Pike	.757	.443	1.200
084 Sangamon	1.585	22.379	23.963
086 Scott	3.043	0	3.043
<i>District total</i>	<i>20.210</i>	<i>78.148</i>	<i>98.358</i>
E. Southeast			
012 Clark	1.264	0	1.264
013 Clay	0	.966	.966
015 Coles	.327	4.314	4.641
017 Crawford	1.530	0	1.530
018 Cumberland	.252	0	.252
021 Douglas	1.125	0	1.125
023 Edgar	.350	1.377	1.727
025 Effingham	.615	1.664	2.279
026 Fayette	.157	1.169	1.326
040 Jasper	.296	.064	.360
051 Lawrence	1.240	0	1.240
061 Marion	.021	4.460	4.481
070 Moutrie	.725	0	.725
080 Richland	.131	1.278	1.409
087 Shelby	1.452	.800	2.252
<i>District total</i>	<i>9.485</i>	<i>16.091</i>	<i>25.577</i>
Southwest			
002 Alexander	.322	1.607	1.929
014 Clinton	.215	1.109	1.323
039 Jackson	.077	8.869	8.946
044 Johnson	.005	.362	.367
067 Monroe	.052	.434	.486
073 Perry	.044	.589	.633
077 Pulaski	.621	0	.621
079 Randolph	.853	2.785	3.637
082 St. Clair	.187	21.318	21.505
091 Union	1.197	.197	1.394
095 Washington	.089	.568	.657
100 Williamson	0	2.432	2.432
<i>District total</i>	<i>3.661</i>	<i>40.271</i>	<i>43.932</i>
Southeast			
024 Edwards	.027	.099	.127
028 Franklin	0	13.703	13.703
030 Gallatin	.686	.055	.741
033 Hamilton	.025	0	.025
035 Hardin	.103	.165	.268
041 Jefferson	0	.448	.448
064 Massac	4.960	0	4.960
076 Pope	0	.147	.147
083 Saline	.013	1.722	1.735
093 Wabash	.867	1.247	2.114
096 Wayne	.151	.857	1.008
097 White	1.271	0	1.271
<i>District total</i>	<i>8.102</i>	<i>18.443</i>	<i>26.545</i>
State total	465.809	1273.946	1739.755

Figures may not add to totals because of independent rounding.

Table 10. Self-Supplied Industry, Electrical Power
Generation Water Withdrawals, Reported 1982
(SIC 4911)

<i>District County</i>	<i>Thermoelectric Groundwater (mgd)</i>	<i>Surface water (mgd)</i>	<i>Hydroelectric Surface water (mgd)</i>	<i>Total (mgd)</i>
Northwest				
006 Bureau	0	0	0	0
008 Carroll	0	0	0	0
037 Henry	0	0	0	0
043 Jo Daviess	0	0	0	0
052 Lee	0	0	0	0
066 Mercer	0	0	0	0
071 Ogle	.223	.277	0	.499
078 Putnam	.077	133.780	0	133.858
081 Rock Island	.192	.981	801.377	802.550
089 Stephenson	<.001	0	0	<.001
098 Whiteside	0	0	0	0
101 Winnebago	0	0	600.000	600.000
<i>District total</i>	.492	135.038	1401.377	1536.908
Northeast				
004 Boone	0	0	0	0
016 Cook	.001	597.893	0	597.894
019 DeKalb	0	0	0	0
022 DuPage	.006	0	0	.006
032 Grundy	.960	1145.205	0	1146.166
045 Kane	0	0	0	0
047 Kendall	0	0	0	0
049 Lake	.005	1664.000	0	1664.005
050 LaSalle	.220	0	1955.169	1955.389
056 McHenry	0	0	0	0
099 Will	3.544	1201.616	1414.521	2619.680
<i>District total</i>	4.736	4608.715	3369.689	7983.140
West				
001 Adams	0	0	0	0
005 Brown	0	0	0	0
029 Fulton	0	226.800	0	226.800
034 Hancock	0	0	17123.288	17123.288
036 Henderson	0	0	0	0
048 Knox	0	0	0	0
055 McDonough	0	0	0	0
085 Schuyler	0	0	0	0
094 Warren	0	0	0	0
<i>District total</i>	0	226.800	17123.288	17350.088
Central				
020 DeWitt	0	.151	0	.151
054 Logan	0	0	0	0
057 McLean	0	0	0	0
058 Macon	0	0	0	0
062 Marshall	0	0	0	0
063 Mason	.860	47.568	0	48.428
065 Menard	0	0	0	0
072 Peoria	0	328.838	0	328.838
088 Stark	0	0	0	0
090 Tazewell	1.375	80.936	0	82.312
102 Woodford	0	0	0	0
<i>District total</i>	2.236	457.493	0	459.728
East				
010 Champaign	0	0	0	0
027 Ford	0	0	0	0
038 Iroquois	0	0	0	0
046 Kankakee	0	0	0	0
053 Livingston	0	0	0	0
074 Piatt	0	0	0	0
092 Vermilion	0	1.824	0	1.824
<i>District total</i>	0	1.824	0	1.824

Table 10. (Concluded)

<i>District County</i>	<i>Thermoelectric Groundwater (mgd)</i>	<i>Thermoelectric Surface water (mgd)</i>	<i>Hydroelectric Surface water (mgd)</i>	<i>Total (mgd)</i>
W. Southwest				
003 Bond	0	0	0	0
007 Calhoun	0	0	0	0
009 Cass	0	0	0	0
011 Christian	0	725.616	0	725.616
031 Greene	0	0	0	0
042 Jersey	0	0	0	0
059 Macoupin	0	0	0	0
060 Madison	0	326.036	0	326.036
068 Montgomery	0	434.001	0	434.001
069 Morgan	.150	213.699	0	213.848
075 Pike	.041	26.800	0	26.841
084 Sangamon	0	249.140	0	249.140
086 Scott	0	0	0	0
<i>District total</i>	<i>.191</i>	<i>1975.292</i>	<i>0</i>	<i>1975.483</i>
E. Southeast				
012 Clark	0	0	0	0
013 Clay	0	0	0	0
015 Coles	0	0	0	0
017 Crawford	.865	68.771	0	69.637
018 Cumberland	0	0	0	0
021 Douglas	0	0	0	0
023 Edgar	0	0	0	0
025 Effingham	0	0	0	0
026 Fayette	0	0	0	0
040 Jasper	0	316.332	0	316.332
051 Lawrence	0	0	0	0
061 Marion	0	0	0	0
070 Moultrie	0	0	0	0
080 Richland	0	0	0	0
087 Shelby	0	0	0	0
<i>District total</i>	<i>.865</i>	<i>385.103</i>	<i>0</i>	<i>385.968</i>
Southwest				
002 Alexander	0	0	0	0
014 Clinton	0	.501	0	.501
039 Jackson	.063	160.551	0	160.614
044 Johnson	0	0	0	0
067 Monroe	0	0	0	0
073 Perry	0	0	0	0
077 Pulaski	0	0	0	0
079 Randolph	0	30.136	0	30.136
082 St. Clair	0	0	0	0
091 Union	0	0	0	0
095 Washington	0	0	0	0
100 Williamson	0	86.700	0	86.700
<i>District total</i>	<i>.063</i>	<i>277.888</i>	<i>0</i>	<i>277.951</i>
Southeast				
024 Edwards	0	0	0	0
028 Franklin	0	0	0	0
030 Gallatin	0	0	0	0
033 Hamilton	0	0	0	0
035 Hardin	0	0	0	0
041 Jefferson	0	0	0	0
064 Massac	1.073	457.581	0	458.654
076 Pope	0	0	0	0
083 Saline	0	0	0	0
093 Wabash	0	17.280	0	17.280
096 Wayne	0	0	0	0
097 White	0	0	0	0
<i>District total</i>	<i>1.073</i>	<i>474.861</i>	<i>0</i>	<i>475.934</i>
State total	9.656	8543.012	21894.354	30447.023

Figures may not add to totals because of independent rounding.

Table 11. Self-Supplied Industry, Manufacturing
Water Withdrawals, Reported 1982
(SIC 2000-3999)

<i>District County</i>	<i>Groundwater (mgd)</i>	<i>Surface water (mgd)</i>	<i>Total (mgd)</i>
Northwest			
006 Bureau	.028	12.975	13.003
008 Carroll	2.175	0	2.175
037 Henry	.033	0	.033
043 Jo Daviess	1.649	0	1.649
052 Lee	.023	1.793	1.816
066 Mercer	0	0	0
071 Ogle	1.090	0	1.090
078 Putnam	.054	3.684	3.738
081 Rock Island	9.275	10.052	19.327
089 Stephenson	1.814	0	1.814
098 Whiteside	2.322	11.228	13.551
101 Winnebago	4.945	0	4.945
<i>District total</i>	<i>23.408</i>	<i>39.732</i>	<i>63.140</i>
Northeast			
004 Boone	.545	0	.545
016 Cook	10.756	294.441	305.197
019 DeKalb	.343	.083	.426
022 DuPage	.920	.017	.937
032 Grundy	6.150	.175	6.325
045 Kane	2.113	.284	2.397
047 Kendall	.736	0	.736
049 Lake	1.510	14.253	15.763
050 LaSalle	4.917	20.982	25.899
056 McHenry	3.907	3.726	7.633
099 Will	6.007	17.780	23.786
<i>District total</i>	<i>37.901</i>	<i>351.741</i>	<i>389.642</i>
West			
001 Adams	9.330	0	9.330
005 Brown	0	0	0
029 Fulton	0	0	0
034 Hancock	<.001	0	<.001
036 Henderson	0	0	0
048 Knox	.001	0	.001
055 McDonough	.009	0	.009
085 Schuyler	0	0	0
094 Warren	0	0	0
<i>District total</i>	<i>9.341</i>	<i>0</i>	<i>9.341</i>
Central			
020 DeWitt	0	.493	.493
054 Logan	0	0	0
057 McLean	.575	0	.575
058 Macon	0	7.488	7.488
062 Marshall	1.167	0	1.167
063 Mason	.011	0	.011
065 Menard	0	0	0
072 Peoria	7.259	19.561	26.820
088 Stark	0	0	0
090 Tazewell	4.195	21.752	25.947
102 Woodford	.004	0	.004
<i>District total</i>	<i>13.211</i>	<i>49.295</i>	<i>62.505</i>
East			
010 Champaign	1.720	0	1.720
027 Ford	.017	0	.017
038 Iroquois	.125	0	.125
046 Kankakee	.192	0	.192
053 Livingston	.051	0	.051
074 Piatt	1.476	0	1.476
092 Vermilion	2.322	0	2.322
<i>District total</i>	<i>5.903</i>	<i>0</i>	<i>5.903</i>

Table 11. (Concluded)

<i>District County</i>	<i>Groundwater (mgd)</i>	<i>Surface water (mgd)</i>	<i>Total (mgd)</i>
W. Southwest			
003 Bond	0	0	0
007 Calhoun	0	0	0
009 Cass	.959	0	.959
011 Christian	.482	0	.482
031 Greene	0	0	0
042 Jersey	0	0	0
059 Macoupin	0	0	0
060 Madison	67.499	16.575	84.074
068 Montgomery	0	.438	.438
069 Morgan	4.961	0	4.961
075 Pike	0	0	0
084 Sangamon	0	0	0
086 Scott	0	0	0
<i>District total</i>	<i>73.902</i>	<i>17.013</i>	<i>90.915</i>
E. Southeast			
012 Clark	0	0	0
013 Clay	0	0	0
015 Coles	.129	0	.129
017 Crawford	0	4.155	4.155
018 Cumberland	0	0	0
021 Douglas	.004	7.108	7.112
023 Edgar	0	0	0
025 Elfingham	0	0	0
026 Fayette	0	0	0
040 Jasper	0	0	0
051 Lawrence	.042	0	.042
061 Marion	0	0	0
070 Moultrie	0	0	0
080 Richland	0	0	0
087 Shelby	.475	0	.475
<i>District total</i>	<i>.650</i>	<i>11.264</i>	<i>11.914</i>
Southwest			
002 Alexander	.018	0	.018
014 Clinton	0	0	0
039 Jackson	0	0	0
044 Johnson	0	0	0
067 Monroe	0	0	0
073 Perry	0	1.417	1.417
077 Pulaski	0	0	0
079 Randolph	0	0	0
082 St. Clair	1.710	0	1.710
091 Union	0	0	0
095 Washington	0	0	0
100 Williamson	0	0	0
<i>District total</i>	<i>1.728</i>	<i>1.417</i>	<i>3.145</i>
Southeast			
024 Edwards	0	0	0
028 Franklin	0	0	0
030 Gallatin	0	0	0
033 Hamilton	0	0	0
035 Hardin	0	0	0
041 Jefferson	0	0	0
064 Massac	4.570	0	4.570
076 Pope	0	0	0
083 Saline	0	0	0
093 Wabash	0	0	0
096 Wayne	0	0	0
097 White	0	0	0
<i>District total</i>	<i>4.570</i>	<i>0</i>	<i>4.570</i>
State total	170.613	470.462	641.075

Figures may not add to totals because of independent rounding.

Table 12. Self-Supplied Industry, Mineral Extraction
Water Withdrawals, Reported 1982
(SIC 1000-1499)

District County	Brine (mgd)	Groundwater Fresh (mgd)	Surface water (mgd)	Total (mgd)
Northwest				
006 Bureau	0	<.001	0	<.001
008 Carroll	0	0	0	0
037 Henry	0	0	0	0
043 Jo Daviess	0	0	0	0
052 Lee	0	0	0	0
066 Mercer	0	0	0	0
071 Ogle	0	.119	0	.119
078 Putnam	0	0	0	0
081 Rock Island	0	.001	.659	.660
089 Stephenson	0	0	0	0
098 Whiteside	0	.002	0	.002
101 Winnebago	0	<.001	.005	.005
<i>District total</i>	0	.122	.664	.786
Northeast				
004 Boone	0	0	.137	.137
016 Cook	0	.030	0	.030
019 DeKalb	0	.001	1.853	1.853
022 DuPage	0	.062	.062	.123
032 Grundy	0	<.001	0	<.001
045 Kane	0	<.001	.460	.460
047 Kendall	0	<.001	0	<.001
049 Lake	0	.524	.007	.531
050 LaSalle	0	.010	3.114	3.124
056 McHenry	0	.061	2.796	2.857
099 Will	0	<.001	.252	.252
<i>District total</i>	0	.688	8.679	9.367
West				
001 Adams	0	0	0	0
005 Brown	0	0	0	0
029 Fulton	0	.343	3.752	4.094
034 Hancock	0	0	0	0
036 Henderson	0	0	0	0
048 Knox	0	0	<.001	<.001
055 McDonough	0	<.001	0	<.001
085 Schuyler	0	0	0	0
094 Warren	0	0	.219	.219
<i>District total</i>	0	.343	3.971	4.314
Central				
020 DeWitt	0	0	0	0
054 Logan	0	.060	.005	.065
057 McLean	0	0	0	0
058 Macon	0	0	0	0
062 Marshall	0	0	0	0
063 Mason	0	0	0	0
065 Menard	0	0	0	0
072 Peoria	0	.006	.575	.582
088 Stark	0	0	0	0
090 Tazewell	0	0	.546	.546
102 Woodford	0	0	0	0
<i>District total</i>	0	.066	1.126	1.192
East				
010 Champaign	0	0	3.416	3.416
027 Ford	0	0	.097	.097
038 Iroquois	0	0	0	0
046 Kankakee	0	0	0	0
053 Livingston	0	0	0	0
074 Piatt	0	0	.395	.395
092 Vermilion	0	<.001	0	<.001
<i>District total</i>	0	<.001	3.907	3.908

Table 12. (Concluded)

District County	Brine (mgd)	Groundwater Fresh (mgd)	Surface water (mgd)	Total (mgd)
W. Southwest				
003 Bond	.005	.003	.252	.261
007 Calhoun	0	0	0	0
009 Cass	0	0	0	0
011 Christian	.418	.064	.139	.621
031 Greene	0	<.001	0	<.001
042 Jersey	0	0	0	0
059 Macoupin	0	0	1.456	1.456
060 Madison	.101	.016	0	.117
068 Montgomery	0	.070	.273	.343
069 Morgan	0	0	0	0
075 Pike	0	0	0	0
084 Sangamon	0	0	1.427	1.427
086 Scott	0	0	0	0
<i>District total</i>	.524	.154	3.547	4.225
E. Southeast				
012 Clark	.066	.114	0	.180
013 Clay	1.025	.227	0	1.252
015 Coles	.032	.019	.025	.076
017 Crawford	2.350	1.116	0	3.466
018 Cumberland	.150	.072	0	.222
021 Douglas	0	.008	.389	.397
023 Edgar	.058	0	0	.058
025 Ellingham	.253	.103	0	.357
026 Fayette	5.469	.015	0	5.484
040 Jasper	.627	.096	0	.723
051 Lawrence	5.218	.084	.005	5.307
061 Marion	9.633	1.082	1.200	11.915
070 Moultrie	0	0	0	0
080 Richland	.939	.043	0	.982
087 Shelby	.030	.004	0	.035
<i>District total</i>	25.852	2.983	1.618	30.452
Southwest				
002 Alexander	0	0	0	0
014 Clinton	.334	.325	.904	1.563
039 Jackson	0	0	2.628	2.628
044 Johnson	0	0	.002	.002
067 Monroe	0	.001	.001	.001
073 Perry	.012	<.001	3.828	3.840
077 Pulaski	0	0	0	0
079 Randolph	0	.010	1.083	1.092
082 St. Clair	0	0	.255	.255
091 Union	0	0	.003	.003
095 Washington	.380	.046	0	.426
100 Williamson	.027	.009	3.856	3.893
<i>District total</i>	.753	.391	12.560	13.704
Southeast				
024 Edwards	.362	.080	0	.442
028 Franklin	.297	.072	2.316	2.685
030 Gallatin	.228	.101	1.015	1.344
033 Hamilton	.650	.042	.093	.785
035 Hardin	0	1.638	.074	1.712
041 Jefferson	.424	.024	.483	.931
064 Massac	0	0	0	0
076 Pope	0	0	0	0
083 Saline	.304	.056	3.135	3.494
093 Wabash	.809	.891	.003	1.703
096 Wayne	1.837	.313	.004	2.154
097 White	3.284	.656	.184	4.125
<i>District total</i>	8.195	3.874	7.308	19.376
State total	35.323	8.621	43.380	87.324

Figures may not add to totals because of independent rounding.

Table 13. Self-Supplied Industry, Excluding Electrical
Power Generation Water Withdrawals, Reported 1982

<i>District County</i>	<i>Groundwater* (mgd)</i>	<i>Surface water (mgd)</i>	<i>Total (mgd)</i>
Northwest			
006 Bureau	.028	12.975	13.003
008 Carroll	2.312	0	2.312
037 Henry	.033	0	.033
043 Jo Daviess	1.700	0	1.700
052 Lee	.585	1.793	2.377
066 Mercer	0	0	0
071 Ogle	1.211	0	1.211
078 Putnam	.054	3.684	3.738
081 Rock Island	9.276	10.711	19.987
089 Stephenson	1.886	0	1.886
098 Whiteside	2.325	11.228	13.553
101 Winnebago	6.514	.005	6.519
<i>District total</i>	<i>25.923</i>	<i>40.397</i>	<i>66.320</i>
Northeast			
004 Boone	.551	.137	.687
016 Cook	16.473	309.279	325.752
019 DeKalb	.373	1.936	2.308
022 DuPage	2.311	.817	3.128
032 Grundy	6.485	.181	6.666
045 Kane	2.179	1.089	3.268
047 Kendall	.752	0	.752
049 Lake	2.276	14.261	16.537
050 LaSalle	4.927	24.096	29.023
056 McHenry	4.043	6.522	10.565
099 Will	7.086	18.032	25.118
<i>District total</i>	<i>47.455</i>	<i>376.350</i>	<i>423.805</i>
West			
001 Adams	9.330	0	9.330
005 Brown	0	0	0
029 Fulton	.343	3.752	4.094
034 Hancock	<.001	0	<.001
036 Henderson	0	0	0
048 Knox	.001	<.001	.002
055 McDonough	.009	0	.009
085 Schuyler	0	0	0
094 Warren	0	.219	.219
<i>District total</i>	<i>9.684</i>	<i>3.971</i>	<i>13.655</i>
Central			
020 DeWitt	0	.493	.493
054 Logan	.060	.005	.065
057 McLean	.575	0	.575
058 Macon	0	7.488	7.488
062 Marshall	1.167	0	1.167
063 Mason	.011	0	.011
065 Menard	0	0	0
072 Peoria	7.390	20.137	27.527
088 Stark	0	0	0
090 Tazewell	4.197	22.298	26.495
102 Woodford	.004	0	.004
<i>District total</i>	<i>13.404</i>	<i>50.420</i>	<i>63.825</i>
East			
010 Champaign	4.337	3.416	7.753
027 Ford	.017	.097	.114
038 Iroquois	.125	0	.125
046 Kankakee	.202	0	.202
053 Livingston	.051	0	.051
074 Piatt	1.476	.395	1.870
092 Vermilion	2.323	0	2.323
<i>District total</i>	<i>8.529</i>	<i>3.907</i>	<i>12.437</i>

Table 13. (Concluded)

<i>District County</i>	<i>Groundwater* (mgd)</i>	<i>Surface water (mgd)</i>	<i>Total (mgd)</i>
W. Southwest			
003 Bond	.008	.252	.264
007 Calhoun	0	0	0
009 Cass	.959	0	.959
011 Christian	.965	.139	1.104
031 Greene	<.001	0	<.001
042 Jersey	0	0	0
059 Macoupin	0	1.456	1.456
060 Madison	67.616	16.575	84.191
068 Montgomery	.070	.711	.781
069 Morgan	4.961	0	4.961
075 Pike	0	0	0
084 Sangamon	0	1.427	1.427
086 Scott	0	0	0
<i>District total</i>	<i>74.580</i>	<i>20.560</i>	<i>95.140</i>
E. Southeast			
012 Clark	.180	0	.180
013 Clay	1.252	0	1.252
015 Coles	.180	.025	.205
017 Crawford	3.466	4.155	7.622
018 Cumberland	.222	0	.222
021 Douglas	.012	7.498	7.509
023 Edgar	.058	0	.058
025 Effingham	.357	0	.357
026 Fayette	5.484	0	5.484
040 Jasper	.723	0	.723
051 Lawrence	5.344	.005	5.349
061 Marion	10.715	1.200	11.915
070 Moultrie	0	0	0
080 Richland	.982	0	.982
087 Shelby	.510	0	.510
<i>District total</i>	<i>29.484</i>	<i>12.882</i>	<i>42.366</i>
Southwest			
002 Alexander	.018	0	.018
014 Clinton	.659	.904	1.563
039 Jackson	0	2.628	2.628
044 Johnson	0	.002	.002
067 Monroe	.001	.001	.001
073 Perry	.012	5.245	5.257
077 Pulaski	0	0	0
079 Randolph	.010	1.083	1.092
082 St. Clair	12.056	.255	12.311
091 Union	0	.003	.003
095 Washington	.426	0	.426
100 Williamson	.036	3.856	3.893
<i>District total</i>	<i>13.217</i>	<i>13.977</i>	<i>27.194</i>
Southeast			
024 Edwards	.442	0	.442
028 Franklin	.369	2.316	2.685
030 Gallatin	.329	1.015	1.344
033 Hamilton	.692	.093	.785
035 Hardin	1.638	.074	1.712
041 Jefferson	.448	.483	.931
064 Massac	4.570	0	4.570
076 Pope	0	0	0
083 Saline	.359	3.135	3.494
093 Wabash	1.700	.003	1.703
096 Wayne	2.150	.004	2.154
097 White	3.941	.184	4.125
<i>District total</i>	<i>16.638</i>	<i>7.308</i>	<i>23.946</i>
State total	238.916	529.771	768.687

*Includes 35,323 mgd brine.

Figures may not add to totals because of independent rounding.

Table 14. Self-Supplied Industry, Total Water Withdrawal, Reported 1982

<i>District County</i>	<i>Groundwater* (mgd)</i>	<i>Surface water (mgd)</i>	<i>Total (mgd)</i>
Northwest			
006 Bureau	.028	12.975	13.003
008 Carroll	2.312	0	2.312
037 Henry	.033	0	.033
043 Jo Daviess	1.700	0	1.700
052 Lee	.585	1.793	2.377
066 Mercer	0	0	0
071 Ogle	1.433	.277	1.710
078 Putnam	.132	137.464	137.596
081 Rock Island	9.467	813.070	822.537
089 Stephenson	1.886	0	1.886
098 Whiteside	2.325	11.228	13.553
101 Winnebago	6.514	600.005	606.519
<i>District total</i>	<i>26.415</i>	<i>1576.812</i>	<i>1603.227</i>
Northeast			
004 Boone	.551	.137	.687
016 Cook	16.474	907.172	923.646
019 DeKalb	.373	1.936	2.308
022 DuPage	2.317	.817	3.134
032 Grundy	7.445	1145.387	1152.831
045 Kane	2.179	1.089	3.268
047 Kendall	.752	0	.752
049 Lake	2.281	1678.261	1680.542
050 LaSalle	5.153	1979.259	1984.412
056 McHenry	4.043	6.522	10.565
099 Will	10.630	2634.168	2644.798
<i>District total</i>	<i>52.198</i>	<i>8354.748</i>	<i>8406.945</i>
West			
001 Adams	9.330	0	9.330
005 Brown	0	0	0
029 Fulton	.343	230.552	230.894
034 Hancock	<.001	17123.288	17123.288
036 Henderson	0	0	0
048 Knox	.001	<.001	.002
055 McDonough	.009	0	.009
085 Schuyler	0	0	0
094 Warren	0	.219	.219
<i>District total</i>	<i>9.684</i>	<i>17354.059</i>	<i>17363.743</i>
Central			
020 DeWitt	0	.644	.644
054 Logan	.060	.005	.065
057 McLean	.575	0	.575
058 Macon	0	7.488	7.488
062 Marshall	1.167	0	1.167
063 Mason	.871	47.568	48.439
065 Menard	0	0	0
072 Peoria	7.390	348.974	356.365
088 Stark	0	0	0
090 Tazewell	5.572	103.234	108.806
102 Woodford	.004	0	.004
<i>District total</i>	<i>15.640</i>	<i>507.913</i>	<i>523.553</i>
East			
010 Champaign	4.337	3.416	7.753
027 Ford	.017	.097	.114
038 Iroquois	.125	0	.125
046 Kankakee	.202	0	.202
053 Livingston	.051	0	.051
074 Piatt	1.476	.395	1.870
092 Vermilion	2.323	1.824	4.146
<i>District total</i>	<i>8.529</i>	<i>5.731</i>	<i>14.260</i>

Table 14. (Concluded)

<i>District County</i>	<i>Groundwater* (mgd)</i>	<i>Surface water (mgd)</i>	<i>Total (mgd)</i>
W. Southwest			
003 Bond	.008	.252	.261
007 Calhoun	0	0	0
009 Cass	.959	0	.959
011 Christian	.965	725.755	726.720
031 Greene	<.001	0	<.001
042 Jersey	0	0	0
059 Macoupin	0	1.456	1.456
060 Madison	67.616	342.611	410.227
068 Montgomery	.070	434.712	434.782
069 Morgan	5.111	213.699	218.809
075 Pike	.041	26.800	26.841
084 Sangamon	0	250.567	250.567
086 Scott	0	0	0
<i>District total</i>	<i>74.771</i>	<i>1995.851</i>	<i>2070.622</i>
E. Southeast			
012 Clark	.180	0	.180
013 Clay	1.252	0	1.252
015 Coles	.180	.025	.205
017 Crawford	4.332	72.927	77.258
018 Cumberland	.222	0	.222
021 Douglas	.012	7.498	7.509
023 Edgar	.058	0	.058
025 Effingham	.357	0	.357
026 Fayette	5.484	0	5.484
040 Jasper	.723	316.332	317.055
051 Lawrence	5.344	.005	5.349
061 Marion	10.715	1.200	11.915
070 Moultrie	0	0	0
080 Richland	.982	0	.982
087 Shelby	.510	0	.510
<i>District total</i>	<i>30.350</i>	<i>397.984</i>	<i>428.334</i>
Southwest			
002 Alexander	.018	0	.018
014 Clinton	.659	1.405	2.064
039 Jackson	.063	163.179	163.242
044 Johnson	0	.002	.002
067 Monroe	.001	.001	.001
073 Perry	.012	5.245	5.257
077 Pulaski	0	0	0
079 Randolph	.010	31.219	31.229
082 St. Clair	12.056	.255	12.311
091 Union	0	.003	.003
095 Washington	.426	0	.426
100 Williamson	.036	90.556	90.593
<i>District total</i>	<i>13.280</i>	<i>291.865</i>	<i>305.145</i>
Southeast			
024 Edwards	.442	0	.442
028 Franklin	.369	2.316	2.685
030 Gallatin	.329	1.015	1.344
033 Hamilton	.692	.093	.785
035 Hardin	1.638	.074	1.712
041 Jefferson	.448	.483	.931
064 Massac	5.643	457.581	463.224
076 Pope	0	0	0
083 Saline	.359	3.135	3.494
093 Wabash	1.700	17.283	18.983
096 Wayne	2.150	.004	2.154
097 White	3.941	.184	4.125
<i>District total</i>	<i>17.711</i>	<i>482.168</i>	<i>499.880</i>
State total	248.578	30967.132	31215.710

*Includes 35.323 mgd brine.

Figures may not add to totals because of independent rounding.

Table 15. Estimated Rural Water Withdrawals, 1982

<i>District County</i>	<i>Domestic (mgd)</i>	<i>Livestock (mgd)</i>	<i>Irrigation (mgd)</i>	<i>Total (mgd)</i>
Northwest				
006 Bureau	.932	.794	.534	2.261
008 Carroll	.878	.689	1.383	2.950
037 Henry	1.317	1.607	1.774	4.698
043 Jo Daviess	.806	1.231	.159	2.195
052 Lee	.288	.401	5.278	5.967
066 Mercer	.792	.912	.139	1.843
071 Ogle	1.752	.913	.960	3.626
078 Putnam	.130	.119	.243	.492
081 Rock Island	1.573	.526	.603	2.702
089 Stephenson	1.309	1.515	.364	3.189
098 Whiteside	2.032	.815	7.535	10.382
101 Winnebago	4.894	.485	1.185	6.564
<i>District total</i>	<i>16.702</i>	<i>10.006</i>	<i>20.158</i>	<i>46.867</i>
Northeast				
004 Boone	.979	.287	.206	1.472
016 Cook	.384	.021	6.284	6.689
019 DeKalb	1.051	.512	.285	1.849
022 DuPage	8.398	.020	4.787	13.204
032 Grundy	.979	.107	.103	1.190
045 Kane	2.492	.315	1.354	4.161
047 Kendall	2.184	.210	.065	2.459
049 Lake	4.387	.079	3.331	7.797
050 LaSalle	1.392	.487	.065	1.944
056 McHenry	5.191	.587	2.503	8.281
099 Will	6.396	.230	1.400	8.026
<i>District total</i>	<i>33.832</i>	<i>2.854</i>	<i>20.383</i>	<i>57.070</i>
West				
001 Adams	.681	1.200	1.234	3.116
005 Brown	.157	.318	0	.475
029 Fulton	.828	.640	.085	1.553
034 Hancock	.631	.838	.380	1.849
036 Henderson	.425	.429	2.838	3.692
048 Knox	.548	1.050	0	1.598
055 McDonough	.401	.568	0	.969
085 Schuyler	.283	.432	.047	.762
094 Warren	.517	.727	0	1.244
<i>District total</i>	<i>4.472</i>	<i>6.201</i>	<i>4.585</i>	<i>15.258</i>
Central				
020 DeWitt	.346	.129	0	.475
054 Logan	.478	.367	0	.845
057 McLean	.886	.621	.055	1.562
058 Macon	1.240	.145	0	1.385
062 Marshall	.267	.246	.165	.679
063 Mason	.641	.197	52.118	52.956
065 Menard	.216	.261	0	.477
072 Peoria	1.213	.315	0	1.528
088 Stark	.221	.211	0	.433
090 Tazewell	.095	.505	7.864	8.465
102 Woodford	.782	.486	.047	1.315
<i>District total</i>	<i>6.386</i>	<i>3.483</i>	<i>60.251</i>	<i>70.120</i>
East				
010 Champaign	2.645	.204	.174	3.024
027 Ford	.270	.170	0	.440
038 Iroquois	.890	.504	1.047	2.441
046 Kankakee	1.533	.178	10.947	12.657
053 Livingston	1.202	.551	0	1.753
074 Piatt	.505	.119	.018	.642
092 Vermilion	1.007	.288	.059	1.353
<i>District total</i>	<i>8.052</i>	<i>2.014</i>	<i>12.246</i>	<i>22.311</i>

Table 15. (Concluded)

<i>District County</i>	<i>Domestic (mgd)</i>	<i>Livestock (mgd)</i>	<i>Irrigation (mgd)</i>	<i>Total (mgd)</i>
W. Southwest				
003 Bond	.737	.382	.063	1.182
007 Calhoun	.338	.272	0	.610
009 Cass	.434	.309	.807	1.550
011 Christian	.662	.229	0	.891
031 Greene	.378	.664	.710	1.753
042 Jersey	.368	.326	.323	1.018
059 Macoupin	.757	.839	0	1.596
060 Madison	1.677	.468	.934	3.079
068 Montgomery	.453	.528	.155	1.136
069 Morgan	.696	.566	0	1.263
075 Pike	.710	1.442	.435	2.587
084 Sangamon	.982	.548	.068	1.598
086 Scott	.266	.198	.316	.780
<i>District total</i>	<i>8.458</i>	<i>6.773</i>	<i>3.811</i>	<i>19.043</i>
E. Southeast				
012 Clark	.422	.405	.601	1.428
013 Clay	.428	.242	0	.669
015 Coles	.318	.214	0	.532
017 Crawford	.506	.252	.157	.915
018 Cumberland	.453	.313	.021	.787
021 Douglas	.404	.214	0	.619
023 Edgar	.538	.395	.016	.949
025 Effingham	.745	.525	.058	1.327
026 Fayette	.822	.365	.097	1.283
040 Jasper	.492	.429	0	.921
051 Lawrence	.345	.132	1.979	2.456
061 Marion	.138	.307	0	.444
070 Moultrie	.183	.185	0	.368
080 Richland	.372	.234	0	.606
087 Shelby	.704	.424	.192	1.320
<i>District total</i>	<i>6.869</i>	<i>4.634</i>	<i>3.121</i>	<i>14.624</i>
Southwest				
002 Alexander	.104	.049	.112	.266
014 Clinton	.859	.746	.062	1.667
019 Jackson	.348	.256	.065	.669
044 Johnson	.449	.226	0	.674
067 Monroe	.587	.255	.260	1.102
073 Perry	.376	.179	.295	.850
077 Pulaski	.322	.097	0	.419
079 Randolph	.751	.440	.249	1.440
082 St. Clair	2.713	.384	.960	4.057
091 Union	.275	.187	.067	.529
095 Washington	.494	.591	.302	1.387
100 Williamson	.158	.140	0	.298
<i>District total</i>	<i>7.436</i>	<i>3.549</i>	<i>2.373</i>	<i>13.357</i>
Southeast				
024 Edwards	.247	.275	0	.522
028 Franklin	.399	.146	0	.545
030 Gallatin	.071	.088	1.012	1.171
033 Hamilton	.340	.174	0	.514
035 Hardin	.131	.058	0	.189
041 Jefferson	.493	.252	.030	.774
064 Massac	.073	.152	.199	.423
076 Pope	.042	.108	.001	.151
083 Saline	.110	.105	0	.215
093 Wabash	.207	.108	.114	.429
096 Wayne	.413	.359	0	.772
097 White	.281	.200	1.061	1.542
<i>District total</i>	<i>2.808</i>	<i>2.025</i>	<i>2.416</i>	<i>7.249</i>
State total	95.015	41.541	129.344	265.899

Figures may not add to totals because of independent rounding.

Table 16. Total Water Withdrawals, Estimated and Reported 1982

<i>District County</i>	<i>Public systems (mgd)</i>	<i>Self-supplied industry (mgd)</i>	<i>Rural (mgd)</i>	<i>Fish and wildlife (mgd)</i>	<i>Total (mgd)</i>
Northwest					
006 Bureau	3.444	13.003	2.261	0	18.707
008 Carroll	1.404	2.312	2.950	2.075	8.741
037 Henry	4.136	.033	4.698	0	8.867
043 Jo Daviess	2.730	1.700	2.195	0	6.626
052 Lee	3.323	2.377	5.967	0	11.667
066 Mercer	.900	0	1.843	0	2.742
071 Ogle	5.395	1.710	3.626	.005	10.737
078 Putnam	.455	137.596	.492	0	138.543
081 Rock Island	20.996	822.537	2.702	0	846.235
089 Stephenson	5.632	1.886	3.189	.002	10.708
098 Whiteside	4.495	13.553	10.382	0	28.429
101 Winnebago	32.300	606.519	6.564	.002	645.384
<i>District total</i>	<i>85.210</i>	<i>1603.227</i>	<i>46.867</i>	<i>2.083</i>	<i>1737.387</i>
Northeast					
004 Boone	3.377	.687	1.472	0	5.536
016 Cook	1080.330	923.646	6.689	0	2010.665
019 DeKalb	7.158	2.308	1.849	0	11.315
022 DuPage	72.358	3.134	13.204	0	88.697
032 Grundy	2.183	1152.831	1.190	0	1156.204
045 Kane	32.147	3.268	4.161	0	39.576
047 Kendall	1.637	.752	2.459	.002	4.849
049 Lake	48.955	1680.542	7.797	.072	1737.366
050 LaSalle	10.947	1984.412	1.944	.018	1997.321
056 McHenry	10.861	10.565	8.281	.288	29.995
099 Will	30.002	2644.798	8.026	.349	2683.175
<i>District total</i>	<i>1299.956</i>	<i>8406.945</i>	<i>57.070</i>	<i>.728</i>	<i>9764.700</i>
West					
001 Adams	8.124	9.330	3.116	<.001	20.571
005 Brown	.073	0	.475	0	.548
029 Fulton	2.536	230.894	1.553	.812	235.796
034 Hancock	1.343	17123.288	1.849	0	17126.480
036 Henderson	6.352	0	3.692	<.001	10.044
048 Knox	1.348	.002	1.598	0	2.947
055 McDonough	3.660	.009	.969	<.001	4.638
085 Schuyler	.430	0	.762	<.001	1.192
094 Warren	2.684	.219	1.244	0	4.147
<i>District total</i>	<i>26.549</i>	<i>17363.743</i>	<i>15.258</i>	<i>.813</i>	<i>17406.362</i>
Central					
020 DeWitt	1.551	.644	.475	.038	2.707
054 Logan	3.335	.065	.845	0	4.244
057 McLean	11.138	.575	1.562	0	13.276
058 Macon	24.361	7.488	1.385	<.001	33.235
062 Marshall	1.171	1.167	.679	0	3.017
063 Mason	1.061	48.439	52.956	.597	103.054
065 Menard	.704	0	.477	<.001	1.181
072 Peoria	23.334	356.365	1.528	.030	381.256
088 Stark	.409	0	.433	0	.841
090 Tazewell	13.190	108.806	8.465	0	130.461
102 Woodford	3.046	.004	1.315	0	4.365
<i>District total</i>	<i>83.299</i>	<i>523.553</i>	<i>70.120</i>	<i>.665</i>	<i>677.637</i>
East					
010 Champaign	18.241	7.753	3.024	0	29.018
027 Ford	1.450	.114	.440	0	2.003
038 Iroquois	1.931	.125	2.441	0	4.497
046 Kankakee	11.811	.202	12.657	0	24.670
053 Livingston	6.283	.051	1.753	0	8.087
074 Piatt	.958	1.870	.642	.014	3.485
092 Vermilion	9.655	4.146	1.353	.003	15.158
<i>District total</i>	<i>50.329</i>	<i>14.260</i>	<i>22.311</i>	<i>.018</i>	<i>86.918</i>

Table 16.(Concluded)

<i>District County</i>	<i>Public systems (mgd)</i>	<i>Self-supplied industry (mgd)</i>	<i>Rural (mgd)</i>	<i>Fish and wildlife (mgd)</i>	<i>Total (mgd)</i>
W. Southwest					
003 Bond	.940	.261	1.182	0	2.383
007 Calhoun	.324	0	.610	6.075	7.009
009 Cass	1.386	.959	1.550	0	3.896
011 Christian	2.013	726.720	.891	.010	729.634
031 Greene	.650	<.001	1.753	0	2.403
042 Jersey	.838	0	1.018	4.441	6.297
059 Macoupin	3.645	1.456	1.596	.001	6.697
060 Madison	55.751	410.227	3.079	0	469.057
068 Montgomery	2.675	434.782	1.136	0	438.593
069 Morgan	1.930	218.809	1.263	0	222.002
075 Pike	1.200	26.841	2.587	0	30.628
084 Sangamon	23.963	250.567	1.598	0	276.128
086 Scott	3.043	0	.780	0	3.823
<i>District total</i>	<i>98.358</i>	<i>2070.622</i>	<i>19.043</i>	<i>10.527</i>	<i>2198.550</i>
E. Southeast					
012 Clark	1.264	.180	1.428	0	2.872
013 Clay	.966	1.252	.669	0	2.887
015 Coles	4.641	.205	.532	0	5.378
017 Crawford	1.530	77.258	.915	0	79.703
018 Cumberland	.252	.222	.787	0	1.261
021 Douglas	1.125	7.509	.619	0	9.253
023 Edgar	1.727	.058	.949	0	2.734
025 Effingham	2.279	.357	1.327	0	3.963
026 Fayette	1.326	5.484	1.283	1.644	9.737
040 Jasper	.360	317.055	.921	0	318.336
051 Lawrence	1.240	5.349	2.456	<.001	9.045
061 Marion	4.481	11.915	.444	0	16.840
070 Moultrie	.725	0	.368	.750	1.843
080 Richland	1.409	.982	.606	0	2.997
087 Shelby	2.252	.510	1.320	0	4.081
<i>District total</i>	<i>25.577</i>	<i>428.334</i>	<i>14.624</i>	<i>2.394</i>	<i>470.929</i>
Southwest					
002 Alexander	1.929	.018	.266	<.001	2.212
014 Clinton	1.323	2.064	1.667	0	5.054
039 Jackson	8.946	163.242	.669	2.742	175.599
044 Johnson	.367	.002	.674	0	1.044
067 Monroe	.486	.001	1.102	0	1.590
073 Perry	.633	5.257	.850	<.001	6.740
077 Pulaski	.621	0	.419	0	1.040
079 Randolph	3.637	31.229	1.440	3.058	39.364
082 St. Clair	21.505	12.311	4.057	0	37.873
091 Union	1.394	.003	.529	.959	2.886
095 Washington	.657	.426	1.387	0	2.470
100 Williamson	2.432	90.593	.298	.027	93.349
<i>District total</i>	<i>43.932</i>	<i>305.145</i>	<i>13.357</i>	<i>6.787</i>	<i>369.221</i>
Southeast					
024 Edwards	.127	.442	.522	0	1.091
028 Franklin	13.703	2.685	.545	.158	17.091
030 Gallatin	.741	1.344	1.171	0	3.256
033 Hamilton	.025	.785	.514	0	1.324
035 Hardin	.268	1.712	.189	0	2.169
041 Jefferson	.448	.931	.774	2.367	4.520
064 Massac	4.960	463.224	.423	.383	468.990
076 Pope	.147	0	.151	0	.298
083 Saline	1.735	3.494	.215	0	5.444
093 Wabash	2.114	18.983	.429	0	21.527
096 Wayne	1.008	2.154	.772	<.001	3.935
097 White	1.271	4.125	1.542	0	6.938
<i>District total</i>	<i>26.545</i>	<i>499.880</i>	<i>7.249</i>	<i>2.909</i>	<i>536.583</i>
State total	1739.755	31215.710	265.899	26.924	33248.287

Figures may not add to totals because of independent rounding.

Table 17. Total Groundwater Withdrawals, Estimated and Reported 1982

<i>District County</i>	<i>Public systems (mgd)</i>	<i>Self-supplied industry (mgd)</i>	<i>Rural* (mgd)</i>	<i>Fish and wildlife (mgd)</i>	<i>Total (mgd)</i>
Northwest					
006 Bureau	3.444	.028	2.261	0	5.732
008 Carroll	1.404	2.312	2.950	.002	6.668
037 Henry	4.136	.033	4.698	0	8.867
043 Jo Daviess	2.730	1.700	2.195	0	6.626
052 Lee	3.323	.585	5.967	0	9.874
066 Mercer	.900	0	1.843	0	2.742
071 Ogle	5.395	1.433	3.626	.005	10.460
078 Putnam	.455	.132	.492	0	1.079
081 Rock Island	2.726	9.467	2.702	0	14.895
089 Stephenson	5.632	1.886	3.189	.002	10.708
098 Whiteside	4.495	2.325	10.382	0	17.201
101 Winnebago	32.300	6.514	6.564	.002	45.379
<i>District total</i>	<i>66.940</i>	<i>26.415</i>	<i>46.867</i>	<i>.010</i>	<i>140.231</i>
Northeast					
004 Boone	3.377	.551	1.472	0	5.399
016 Cook	85.167	16.474	6.689	0	108.330
019 DeKalb	7.158	.373	1.849	0	9.379
022 DuPage	72.358	2.317	13.204	0	87.880
032 Grundy	2.183	7.445	1.190	0	10.817
045 Kane	32.147	2.179	4.161	0	38.487
047 Kendall	1.637	.752	2.459	.002	4.849
049 Lake	14.660	2.281	7.797	.072	24.809
050 LaSalle	10.947	5.153	1.944	.018	18.063
056 McHenry	10.861	4.043	8.281	.288	23.473
099 Will	30.002	10.630	8.026	.007	48.664
<i>District total</i>	<i>270.498</i>	<i>52.198</i>	<i>57.070</i>	<i>.386</i>	<i>380.151</i>
West					
001 Adams	1.892	9.330	3.116	<.001	14.338
005 Brown	.058	0	.475	0	.532
029 Fulton	.990	.343	1.553	0	2.886
034 Hancock	.221	<.001	1.849	0	2.070
036 Henderson	6.352	0	3.692	<.001	10.044
048 Knox	1.348	.001	1.598	0	2.947
055 McDonough	.675	.009	.969	<.001	1.653
085 Schuyler	.430	0	.762	<.001	1.192
094 Warren	2.684	0	1.244	0	3.928
<i>District total</i>	<i>14.650</i>	<i>9.684</i>	<i>15.258</i>	<i>.001</i>	<i>39.592</i>
Central					
020 DeWitt	1.551	0	.475	.038	2.063
054 Logan	3.335	.060	.845	0	4.239
057 McLean	4.653	.575	1.562	0	6.790
058 Macon	1.038	0	1.385	<.001	2.424
062 Marshall	1.171	1.167	.679	0	3.017
063 Mason	1.061	.871	52.956	.071	54.960
065 Menard	.704	0	.477	<.001	1.181
072 Peoria	16.645	7.390	1.528	.030	25.593
088 Stark	.409	0	.433	0	.841
090 Tazewell	12.874	5.572	8.465	0	26.912
102 Woodford	1.586	.004	1.315	0	2.905
<i>District total</i>	<i>45.026</i>	<i>15.640</i>	<i>70.120</i>	<i>.139</i>	<i>130.925</i>
East					
010 Champaign	18.241	4.337	3.024	0	25.602
027 Ford	1.450	.017	.440	0	1.907
038 Iroquois	1.931	.125	2.441	0	4.497
046 Kankakee	1.736	.202	12.657	0	14.595
053 Livingston	1.581	.051	1.753	0	3.385
074 Piatt	.958	1.476	.642	.014	3.091
092 Vermilion	1.341	2.323	1.353	.003	5.020
<i>District total</i>	<i>27.237</i>	<i>8.529</i>	<i>22.311</i>	<i>.018</i>	<i>58.096</i>

Table 17. (Concluded)

<i>District County</i>	<i>Public systems (mgd)</i>	<i>Self-supplied industry (mgd)</i>	<i>Rural* (mgd)</i>	<i>Fish and wildlife (mgd)</i>	<i>Total (mgd)</i>
W. Southwest					
003 Bond	.064	.008	1.182	0	1.254
007 Calhoun	.324	0	.610	.207	1.141
009 Cass	1.267	.959	1.550	0	3.777
011 Christian	1.291	.965	.891	.010	3.157
031 Greene	.365	< .001	1.753	0	2.118
042 Jersey	.838	0	1.018	.149	2.005
059 Macoupin	.019	0	1.596	.001	1.616
060 Madison	9.982	67.616	3.079	0	80.677
068 Montgomery	.586	.070	1.136	0	1.792
069 Morgan	.088	5.111	1.263	0	6.462
075 Pike	.757	.041	2.587	0	3.385
084 Sangamon	1.585	0	1.598	0	3.183
086 Scott	3.043	0	.780	0	3.823
<i>District total</i>	<i>20.210</i>	<i>74.771</i>	<i>19.041</i>	<i>.367</i>	<i>114.391</i>
E. Southeast					
012 Clark	1.264	.180	1.428	0	2.872
013 Clay	0	1.252	.669	0	1.921
015 Coles	.327	.180	.532	0	1.039
017 Crawford	1.530	4.332	.915	0	6.777
018 Cumberland	.252	.222	.787	0	1.261
021 Douglas	1.125	.012	.619	0	1.756
023 Edgar	.350	.058	.949	0	1.357
025 Ellingham	.615	.357	1.327	0	2.299
026 Fayette	.157	5.484	1.283	0	6.924
040 Jasper	.296	.723	.921	0	1.941
051 Lawrence	1.240	5.344	2.456	< .001	9.040
061 Marion	.021	10.715	.444	0	11.180
070 Moultrie	.725	0	.368	0	1.093
080 Richland	.131	.982	.606	0	1.719
087 Shelby	1.452	.510	1.320	0	3.281
<i>District total</i>	<i>9.485</i>	<i>30.350</i>	<i>14.624</i>	<i>< .001</i>	<i>54.459</i>
Southwest					
002 Alexander	.322	.018	.266	< .001	.605
014 Clinton	.215	.659	1.667	0	2.541
039 Jackson	.077	.063	.669	2.742	3.551
044 Johnson	.005	0	.674	0	.679
067 Monroe	.052	.001	1.102	0	1.155
073 Perry	.044	.012	.850	< .001	.906
077 Pulaski	.621	0	.419	0	1.040
079 Randolph	.853	.010	1.440	< .001	2.302
082 St. Clair	.187	12.056	4.057	0	16.300
091 Union	1.197	0	.529	.959	2.685
095 Washington	.089	.426	1.387	0	1.902
100 Williamson	0	.036	.298	0	.334
<i>District total</i>	<i>3.661</i>	<i>13.280</i>	<i>13.357</i>	<i>3.702</i>	<i>34.001</i>
Southeast					
024 Edwards	.027	.442	.522	0	.992
028 Franklin	0	.369	.545	0	.915
030 Gallatin	.686	.329	1.171	0	2.186
033 Hamilton	.025	.692	.514	0	1.231
035 Hardin	.103	1.638	.189	0	1.930
041 Jefferson	0	.448	.774	0	1.222
064 Massac	4.960	5.643	.423	.383	11.409
076 Pope	0	0	.151	0	.151
083 Saline	.013	.359	.215	0	.587
093 Wabash	.867	1.700	.429	0	2.997
096 Wayne	.151	2.150	.772	< .001	3.074
097 White	1.271	3.941	1.542	0	6.753
<i>District total</i>	<i>8.102</i>	<i>17.711</i>	<i>7.249</i>	<i>.384</i>	<i>33.447</i>
State total	465.809	248.578	265.899	5.008	985.294

*Includes estimated rural water withdrawals regardless of source.
Figures may not add to totals because of independent rounding.

Table 18. Total Surface Water Withdrawals, Reported 1982

<i>District County</i>	<i>Public systems (mgd)</i>	<i>Self-supplied industry (mgd)</i>	<i>Fish and wildlife (mgd)</i>	<i>Total* (mgd)</i>
Northwest				
006 Bureau	0	12.975	0	12.975
008 Carroll	0	0	2.073	2.073
037 Henry	0	0	0	0
043 Jo Daviess	0	0	0	0
052 Lee	0	1.793	0	1.793
066 Mercer	0	0	0	0
071 Ogle	0	.277	0	.277
078 Putnam	0	137.464	0	137.464
081 Rock Island	18.270	813.070	0	831.340
089 Stephenson	0	0	0	0
098 Whiteside	0	11.228	0	11.228
101 Winnebago	0	600.005	0	600.005
<i>District total</i>	<i>18.270</i>	<i>1576.812</i>	<i>2.073</i>	<i>1597.155</i>
Northeast				
004 Boone	0	.137	0	.137
016 Cook	995.163	907.172	0	1902.335
019 DeKalb	0	1.936	0	1.936
022 DuPage	0	.817	0	.817
032 Grundy	0	1145.387	0	1145.387
045 Kane	0	1.089	0	1.089
047 Kendall	0	0	0	0
049 Lake	34.295	1678.261	0	1712.557
050 LaSalle	0	1979.259	0	1979.259
056 McHenry	0	6.522	0	6.522
099 Will	0	2634.168	.342	2634.511
<i>District total</i>	<i>1029.458</i>	<i>8354.748</i>	<i>.342</i>	<i>9384.548</i>
West				
001 Adams	6.232	0	0	6.232
005 Brown	.015	0	0	.015
029 Fulton	1.545	230.552	.812	232.909
034 Hancock	1.122	17123.288	0	17124.409
036 Henderson	0	0	0	0
048 Knox	0	<.001	0	<.001
055 McDonough	2.985	0	0	2.985
085 Schuyler	0	0	0	0
094 Warren	0	.219	0	.219
<i>District total</i>	<i>11.899</i>	<i>17354.059</i>	<i>.812</i>	<i>17366.771</i>
Central				
020 DeWitt	0	.644	0	.644
054 Logan	0	.005	0	.005
057 McLean	6.486	0	0	6.486
058 Macon	23.323	7.488	0	30.811
062 Marshall	0	0	0	0
063 Mason	0	47.568	.526	48.094
065 Menard	0	0	0	0
072 Peoria	6.689	348.974	0	355.663
088 Stark	0	0	0	0
090 Tazewell	.316	103.234	0	103.550
102 Woodford	1.460	0	0	1.460
<i>District total</i>	<i>38.274</i>	<i>507.913</i>	<i>.526</i>	<i>546.713</i>
East				
010 Champaign	0	3.416	0	3.416
027 Ford	0	.097	0	.097
038 Iroquois	0	0	0	0
046 Kankakee	10.075	0	0	10.075
053 Livingston	4.702	0	0	4.702
074 Piatt	0	.395	0	.395
092 Vermilion	8.314	1.824	0	10.138
<i>District total</i>	<i>23.091</i>	<i>5.731</i>	<i>0</i>	<i>28.822</i>

Table 18. (Concluded)

<i>District County</i>	<i>Public systems (mgd)</i>	<i>Self-supplied industry (mgd)</i>	<i>Fish and wildlife (mgd)</i>	<i>Total* (mgd)</i>
W. Southwest				
003 Bond	.876	.252	0	1.128
007 Calhoun	0	0	5.868	5.868
009 Cass	.119	0	0	.119
011 Christian	.722	725.755	0	726.477
031 Greene	.286	0	0	.286
042 Jersey	0	0	4.292	4.292
059 Macoupin	3.625	1.456	0	5.081
060 Madison	45.769	342.611	0	388.380
068 Montgomery	2.089	434.712	0	436.801
069 Morgan	1.842	213.699	0	215.540
075 Pike	.443	26.800	0	27.243
084 Sangamon	22.379	250.567	0	272.945
086 Scott	0	0	0	0
<i>District total</i>	<i>78.148</i>	<i>1,995.851</i>	<i>10.160</i>	<i>2,084.159</i>
E. Southeast				
012 Clark	0	0	0	0
013 Clay	.966	0	0	.966
015 Coles	4.314	.025	0	4.339
017 Crawford	0	72.927	0	72.927
018 Cumberland	0	0	0	0
021 Douglas	0	7.498	0	7.498
023 Edgar	1.377	0	0	1.377
025 Illingham	1.664	0	0	1.664
026 Fayette	1.169	0	1.644	2.813
040 Jasper	.064	316.332	0	316.396
051 Lawrence	0	.005	0	.005
061 Marion	4.460	1.200	0	5.660
070 Moultrie	0	0	.750	.750
080 Richland	1.278	0	0	1.278
087 Shelby	.800	0	0	.800
<i>District total</i>	<i>16.091</i>	<i>397.984</i>	<i>2.394</i>	<i>416.470</i>
Southwest				
002 Alexander	1.607	0	0	1.607
014 Clinton	1.109	1.405	0	2.513
039 Jackson	8.869	163.179	0	172.048
044 Johnson	.362	.002	0	.365
067 Monroe	.434	.001	0	.435
073 Perry	.589	5.245	0	5.834
077 Pulaski	0	0	0	0
079 Randolph	2.785	31.219	3.058	37.061
082 St. Clair	21.318	.255	0	21.573
091 Union	.197	.003	0	.201
095 Washington	.568	0	0	.568
100 Williamson	2.432	90.556	.027	93.015
<i>District total</i>	<i>40.271</i>	<i>291.865</i>	<i>3.084</i>	<i>335.220</i>
Southeast				
024 Edwards	.099	0	0	.099
028 Franklin	13.703	2.316	.158	16.177
030 Gallatin	.055	1.015	0	1.070
033 Hamilton	0	.093	0	.093
035 Hardin	.165	.074	0	.239
041 Jefferson	.448	.483	2.367	3.298
064 Massac	0	457.581	0	457.581
076 Pope	.147	0	0	.147
083 Saline	1.722	3.135	0	4.857
093 Wabash	1.247	17.283	0	18.530
096 Wayne	.857	.004	0	.861
097 White	0	.184	0	.184
<i>District total</i>	<i>18.443</i>	<i>482.168</i>	<i>2.525</i>	<i>503.136</i>
State total	1273.946	30967.132	21.916	32262.994

*Rural water withdrawals not included, see table 17 and page 7.
 Figures may not add to totals because of independent rounding.

Table 19. Estimated Groundwater Withdrawals from
Major Geohydrologic Systems, Excluding
Rural Domestic and Livestock, 1982

District County	Sand and gravel (mgd)	Mississippian- Pennsylvanian (mgd)	Aquifer system		Total (mgd)
			Silurian- Devonian (mgd)	Cambrian- Ordovician (mgd)	
Northwest					
006 Bureau	2.498	0	.123	1.385	4.006
008 Carroll	3.389	0	.144	1.566	5.099
037 Henry	2.469	.005	1.172	2.297	5.943
043 Jo Daviess	2.016	0	0	2.573	4.589
052 Lee	4.997	.013	.415	4.107	9.531
066 Mercer	.301	0	.392	.346	1.039
071 Ogle	.006	0	.537	7.247	7.789
078 Putnam	.604	.039	0	.187	.830
081 Rock Island	6.402	0	3.447	2.948	12.797
089 Stephenson	1.612	0	.079	6.195	7.886
098 Whiteside	9.810	0	.387	4.230	14.426
101 Winnebago	19.477	0	.167	20.791	40.435
District total	53.581	.056	6.863	53.872	114.372
Northeast					
004 Boone	.978	0	.037	3.129	4.144
016 Cook	7.392	0	34.072	66.547	108.010
019 DeKalb	.134	0	.215	7.497	7.845
022 DuPage	2.959	0	47.064	29.885	79.908
032 Grundy	.633	.068	0	9.030	9.731
045 Kane	5.785	0	2.524	27.411	35.720
047 Kendall	.726	0	.171	1.558	2.454
049 Lake	5.394	0	4.825	10.436	20.655
050 LaSalle	3.155	.016	.073	12.922	16.167
056 McHenry	8.175	0	5.106	4.277	17.558
099 Will	3.367	0	14.818	24.078	42.264
District total	38.698	.084	108.904	196.771	344.458
West					
001 Adams	12.150	.306	0	0	12.456
005 Brown	.045	.013	0	0	.058
029 Fulton	.583	.348	0	.487	1.418
034 Hancock	.571	.031	0	0	.602
036 Henderson	9.061	.084	0	.045	9.190
048 Knox	0	.094	.274	.981	1.349
055 McDonough	.057	.100	.079	.448	.684
085 Schuyler	.454	.023	0	0	.477
094 Warren	.115	.014	.033	2.522	2.684
District total	23.035	1.013	.386	4.483	28.918
Central					
020 DeWitt	1.551	0	0	0	1.551
054 Logan	3.395	0	0	0	3.395
057 McLean	5.115	0	0	.169	5.283
058 Macon	1.038	0	0	0	1.038
062 Marshall	2.282	0	0	.221	2.504
063 Mason	54.050	0	0	0	54.050
065 Menard	.704	0	0	0	.704
072 Peoria	23.113	.035	.019	1.229	24.396
088 Stark	0	0	.082	.327	.409
090 Tazewell	26.311	0	0	0	26.311
102 Woodford	1.457	.001	0	.179	1.637
District total	119.016	.035	.101	2.125	121.277
East					
010 Champaign	22.752	0	0	0	22.752
027 Ford	1.438	0	.029	0	1.467
038 Iroquois	2.355	0	.748	0	3.103
046 Kankakee	.089	0	12.766	.021	12.875
053 Livingston	1.427	.036	.007	.162	1.632
074 Piatt	2.452	0	0	0	2.452
092 Vermilion	3.623	.027	.072	0	3.722
District total	34.136	.063	13.622	.182	48.003

Table 19. (Concluded)

<i>District County</i>	<i>Sand and gravel (mgd)</i>	<i>Mississippian- Pennsylvanian (mgd)</i>	<i>Aquifer system Silurian- Devonian (mgd)</i>	<i>Cambrian- Ordovician (mgd)</i>	<i>Total (mgd)</i>
W. Southwest					
003 Bond	.130	.005	0	0	.135
007 Calhoun	.111	0	.213	0	.324
009 Cass	3.033	0	0	0	3.033
011 Christian	1.810	.052	.393	0	2.256
031 Greene	.792	.002	.281	0	1.075
042 Jersey	1.161	0	0	0	1.161
059 Macoupin	.019	0	0	0	.019
060 Madison	78.395	.054	.084	0	78.533
068 Montgomery	.741	.070	0	0	.811
069 Morgan	5.199	0	0	0	5.199
075 Pike	1.194	.039	0	0	1.234
084 Sangamon	1.653	0	0	0	1.653
086 Scott	3.184	.176	0	0	3.359
<i>District total</i>	<i>97.425</i>	<i>.398</i>	<i>.970</i>	<i>0</i>	<i>98.793</i>
E. Southeast					
012 Clark	1.622	.400	0	.023	2.045
013 Clay	.175	1.077	0	0	1.252
015 Coles	.475	.032	0	0	.507
017 Crawford	3.666	2.353	0	0	6.018
018 Cumberland	.344	.150	0	0	.495
021 Douglas	.596	.011	.531	0	1.137
023 Edgar	.367	.058	0	0	.424
025 Effingham	.661	.369	0	0	1.030
026 Fayette	.220	5.518	0	0	5.737
040 Jasper	.375	.645	0	0	1.020
051 Lawrence	3.344	5.220	0	0	8.563
061 Marion	.814	5.026	4.896	0	10.736
070 Moultrie	.725	0	0	0	.725
080 Richland	.043	1.070	0	0	1.113
087 Shelby	2.123	.030	0	0	2.154
<i>District total</i>	<i>15.549</i>	<i>21.958</i>	<i>5.426</i>	<i>.023</i>	<i>42.956</i>
Southwest					
002 Alexander	.403	.049	0	0	.452
014 Clinton	.569	.123	.244	0	.936
039 Jackson	.205	0	0	0	.205
044 Johnson	0	.005	0	0	.005
067 Monroe	.307	.001	.005	0	.313
073 Perry	.296	.055	0	0	.351
077 Pulaski	.130	0	.491	0	.621
079 Randolph	.386	.726	0	0	1.111
082 St. Clair	13.197	.006	0	0	13.203
091 Union	1.120	.144	0	0	1.264
095 Washington	.437	.368	.012	0	.817
100 Williamson	.009	.027	0	0	.036
<i>District total</i>	<i>17.057</i>	<i>1.505</i>	<i>.752</i>	<i>0</i>	<i>19.314</i>
Southeast					
024 Edwards	.108	.362	0	0	.469
028 Franklin	.042	.328	0	0	.369
030 Gallatin	1.799	.228	0	0	2.027
033 Hamilton	.052	.665	0	0	.717
035 Hardin	.035	1.706	0	0	1.741
041 Jefferson	.054	.424	0	0	.478
064 Massac	2.486	8.316	0	0	10.801
076 Pope	.001	0	0	0	.001
083 Saline	.056	.316	0	0	.372
093 Wabash	1.760	.922	0	0	2.682
096 Wayne	.310	1.992	0	0	2.301
097 White	2.909	3.363	0	0	6.272
<i>District total</i>	<i>9.610</i>	<i>18.620</i>	<i>0</i>	<i>0</i>	<i>28.230</i>
State total	408.108	43.732	117.309	277.171	846.320

Figures may not add to totals because of independent rounding.

Table 20. Township Water Withdrawals,
SMSA's, 1982
(mgd)

		Public					Self-supplied Industry					Total		
SMSA	County	Surface	Sand	Mississippian-	Silurian-	Cambrian-	Total	Surface	Sand	Mississippian-	Silurian-	Cambrian-	Total	Total
	Township	water	and	Pennsylvanian	Devonian	Ordovician	ground	water	and	Pennsylvanian	Devonian	Ordovician	ground	
	and range		gravel				water		gravel				water	Total
Bloomington-Normal														
Mc Lean County														
	05721N02E	0	.080	0	0	0	.080	0	0	0	0	0	0	.080
	05722N01W	0	.104	0	0	0	.104	0	0	0	0	0	0	.104
	05722N02E	0	.071	0	0	0	.071	0	0	0	0	0	0	.071
	05722N03E	0	.044	0	0	0	.044	0	0	0	0	0	0	.044
	05722N04E	0	.217	0	0	0	.217	0	0	0	0	0	0	.217
	05722N06E	0	.038	0	0	0	.038	0	0	0	0	0	0	.038
	05723N01E	0	.693	0	0	0	.693	0	0	0	0	0	0	.693
	05723N01W	0	.068	0	0	0	.068	0	0	0	0	0	0	.068
	05723N02E	0	.094	0	0	0	.094	0	.575	0	0	0	.575	.670
	05723N03E	0	.005	0	0	0	.005	0	0	0	0	0	0	.005
	05723N04E	0	.017	0	0	0	.017	0	0	0	0	0	0	.017
	05723N05E	0	.056	0	0	0	.056	0	0	0	0	0	0	.056
	05723N06E	0	.100	0	0	0	.100	0	0	0	0	0	0	.100
	05724N01W	0	.776	0	0	0	.776	0	0	0	0	0	0	.776
	05724N02E	0	1.710	0	0	0	1.710	0	0	0	0	0	0	1.710
	05724N04E	0	.015	0	0	0	.015	0	0	0	0	0	0	.015
	05724N05E	0	.057	0	0	0	.057	0	0	0	0	0	0	.057
	05724N06E	0	.009	0	0	0	.009	0	0	0	0	0	0	.009
	05725N01E	0	.030	0	0	0	.030	0	0	0	0	0	0	.030
	05725N02E	6.486	.001	0	0	0	.001	0	0	0	0	0	0	6.487
	05725N03E	0	.004	0	0	0	.004	0	0	0	0	0	0	.004
	05725N04E	0	.146	0	0	0	.146	0	0	0	0	0	0	.146
	05725N06E	0	.005	0	0	0	.005	0	0	0	0	0	0	.005
	05726N03E	0	.123	0	0	0	.123	0	0	0	0	0	0	.123
	05726N04E	0	.020	0	0	.169	.189	0	0	0	0	0	0	.189
	Total	6.486	4.483	0	0	.169	4.652	0	.575	0	0	0	.575	11.882
Champaign-Urbana-Rantoul														
Champaign County														
	01017N07E	0	.019	0	0	0	.019	0	0	0	0	0	0	.019
	01017N08E	0	.072	0	0	0	.072	0	0	0	0	0	0	.072
	01017N11E	0	.035	0	0	0	.035	0	0	0	0	0	0	.035
	01018N08E	0	.205	0	0	0	.205	0	0	0	0	0	0	.205
	01018N10E	0	.059	0	0	0	.059	0	0	0	0	0	0	.059
	01018N14W	0	.113	0	0	0	.113	0	0	0	0	0	0	.113
	01019N07E	0	.007	0	0	0	.007	0	0	0	0	0	0	.007
	01019N08E	0	10.084	0	0	0	10.084	0	1.718	0	0	0	1.718	11.802
	01019N09E	0	.443	0	0	0	.443	0	0	0	0	0	0	.443
	01019N10E	0	.185	0	0	0	.185	0	0	0	0	0	0	.185
	01019N10W	0	0	0	0	0	0	0	<.001	0	0	0	<.001	<.001
	01019N14W	0	.063	0	0	0	.063	0	0	0	0	0	0	.063
	01020N07E	0	.423	0	0	0	.423	3.106	0	0	0	0	0	3.529
	01020N08E	0	4.701	0	0	0	4.701	0	0	0	0	0	0	4.701
	01020N09E	0	.029	0	0	0	.029	0	0	0	0	0	0	.029
	01020N14W	0	.022	0	0	0	.022	0	0	0	0	0	0	.022
	01021N09E	0	.668	0	0	0	.668	.310	2.619	0	0	0	2.619	3.596
	01021N091	0	.020	0	0	0	.020	0	0	0	0	0	0	.020
	01021N10E	0	.056	0	0	0	.056	0	0	0	0	0	0	.056
	01021N14W	0	.016	0	0	0	.016	0	0	0	0	0	0	.016
	01022N07E	0	.152	0	0	0	.152	0	0	0	0	0	0	.152
	01022N08E	0	.019	0	0	0	.019	0	0	0	0	0	0	.019
	01022N09E	0	.843	0	0	0	.843	0	0	0	0	0	0	.843
	01022N10E	0	.006	0	0	0	.006	0	0	0	0	0	0	.006
	01022N14W	0	.002	0	0	0	.002	0	0	0	0	0	0	.002
	Total	0	18.241	0	0	0	18.241	3.416	4.337	0	0	0	4.337	25.994
Chicago														
Cook County														
	01635N13E	0	0	0	5.616	1.129	6.745	0	0	0	.731	0	.731	7.476
	01635N14E	0	0	0	7.476	4.222	11.698	0	0	0	.486	.314	.800	12.498
	01635N15E	0	0	0	.108	0	.108	0	0	0	0	0	0	.108
	01636N12E	0	0	0	1.949	1.251	3.200	0	0	0	.225	0	.225	3.426

Table 20. (Continued)

SMSA County Township and range	Public						Self-supplied Industry						Total
	Surface water	Sand and gravel	Mississippian- Pennsylvanian	Silurian- Devonian	Cambrian- Ordovician	Total ground water	Surface water	Sand and gravel	Mississippian- Pennsylvanian	Silurian- Devonian	Cambrian- Ordovician	Total ground water	Total
Cook County Cont.													
01636N13E	0	0	0	1.350	.438	1.788	0	0	0	.299	.008	.307	2.095
01636N14E	0	0	0	.348	1.017	1.365	.534	0	0	.007	0	.007	1.907
01637N11E	0	0	0	0	.593	.593	0	0	0	<.001	.276	.276	.869
01637N12E	0	0	0	.073	.151	.223	0	0	0	.093	0	.093	.316
01637N13E	0	0	0	0	0	0	5.786	0	0	.028	0	.028	5.815
01637N14E	0	0	0	0	0	0	17.251	0	0	0	0	0	17.251
01637N15E	0	0	0	0	0	0	75.770	0	0	0	0	0	75.770
01638N12E	0	0	0	1.851	2.790	4.641	0	0	0	4.294	3.665	7.959	12.600
01638N13E	0	0	0	0	0	0	137.671	0	0	.002	2.008	2.010	139.682
01638N14E	<.001	0	0	0	0	0	106.575	0	0	0	.221	.221	106.796
01638N15E	406.184	0	0	0	0	0	175.096	0	0	0	0	0	581.279
01639N12E	0	0	0	.004	3.967	3.971	.655	0	0	.194	.289	.483	5.109
01639N13E	0	0	0	0	0	0	0	0	0	0	.193	.193	.193
01639N14E	544.247	0	0	0	0	0	377.231	0	0	0	.060	.060	921.538
01640N12E	0	0	0	0	0	0	0	0	0	.012	.704	.715	.715
01640N13E	0	0	0	0	0	0	0	0	0	0	.641	.641	.641
01641N09E	0	2.478	0	.240	1.774	4.492	0	0	0	<.001	0	<.001	4.492
01641N10E	0	2.112	0	2.361	6.890	11.363	0	.003	0	.059	0	.062	11.425
01641N11E	0	0	0	.266	9.178	9.444	0	0	0	.053	.018	.071	9.516
01641N12E	0	0	0	0	2.777	2.777	0	0	0	0	0	0	2.777
01641N13E	0	0	0	0	0	0	4.032	0	0	0	.247	.247	4.279
01641N14E	23.733	0	0	0	0	0	6.569	0	0	0	0	0	30.302
01642N09E	0	.013	0	.457	0	.471	0	.008	0	.151	.004	.163	.634
01642N10E	0	2.211	0	.003	5.696	7.910	0	0	0	.029	.455	.484	8.393
01642N11E	0	0	0	.403	13.427	13.830	0	0	0	.014	.022	.036	13.865
01642N12E	5.180	0	0	.288	.261	.549	.002	0	0	.003	.658	.660	6.391
01642N13E	15.820	0	0	0	0	0	0	0	0	0	0	0	15.820
Total	995.163	6.814	0	22.793	55.559	85.167	907.172	.012	0	6.679	9.784	16.474	2003.976
DuPage County													
02237N11E	0	0	0	.153	.326	.479	0	0	0	.918	0	.918	1.397
02238N09E	0	0	0	3.617	1.898	5.515	0	0	0	.120	0	.120	5.635
02238N10E	0	0	0	5.866	1.666	7.531	0	0	0	.176	.030	.206	7.737
02238N11E	0	0	0	9.841	2.891	12.732	0	0	0	.348	0	.348	13.080
02239N09E	0	0	0	.879	1.939	2.818	.726	0	0	.058	.001	.058	3.602
02239N10E	0	0	0	9.137	0	9.137	.017	0	0	.068	.006	.074	9.228
02239N11E	0	0	0	3.176	11.363	14.539	0	0	0	.011	.233	.243	14.795
02240N09E	0	.605	0	0	1.532	2.136	.062	0	0	.210	.130	.340	2.538
02240N10E	0	.945	0	4.248	2.292	7.485	0	0	0	<.001	0	<.001	7.485
02240N11E	0	1.218	0	3.285	5.483	9.985	0	0	0	.008	0	.008	9.994
Total	0	2.768	0	40.201	29.390	72.358	.805	0	0	1.918	.399	2.317	75.493
Kane County													
04502N08E	0	0	0	0	0	0	0	<.001	0	0	0	<.001	<.001
04538N07E	0	.172	0	0	1.403	1.575	0	0	0	0	0	0	1.575
04538N08E	0	.005	0	.187	9.620	9.813	0	0	0	1.399	.071	1.470	11.283
04539N07E	0	0	0	0	.039	.039	0	0	0	0	.239	.239	.278
04539N08E	0	0	0	0	3.437	3.437	.345	0	0	.066	.028	.094	3.876
04540N06E	0	.040	0	0	0	.040	0	0	0	0	.001	.001	.041
04540N07E	0	.056	0	0	.111	.168	0	0	0	0	0	0	.168
04540N08E	0	1.537	0	.004	1.870	3.411	0	0	0	0	.161	.161	3.573
04541N06E	0	0	0	0	.047	.047	0	0	0	0	0	0	.047
04541N08E	0	.585	0	0	9.475	10.060	.744	.009	0	.165	.005	.180	10.983
04542N06E	0	0	0	0	.187	.187	0	0	0	0	.034	.034	.221
04542N07E	0	.005	0	0	0	.005	0	0	0	0	0	0	.005
04542N08E	0	2.902	0	.036	.427	3.365	0	0	0	0	0	0	3.365
Total	0	5.302	0	.227	26.617	32.147	1.089	.009	0	1.631	.539	2.179	35.415
Lake County													
04943N09E	0	1.097	0	.032	.005	1.135	0	.161	0	.029	0	.190	1.324
04943N10E	0	0	0	.146	1.080	1.226	0	.008	0	0	.071	.078	1.305
04943N11E	0	.023	0	.355	1.651	2.029	.007	.100	0	<.001	.023	.124	2.159
04943N12E	8.576	0	0	0	0	0	0	0	0	0	.511	.511	9.088
04944N09E	0	.201	0	.474	.004	.679	0	0	0	0	0	0	.679
04944N10E	0	.447	0	.133	.786	1.367	0	0	0	<.001	0	<.001	1.367

Table 20. (Continued)

SMSA County Township and range	Public						Self-supplied Industry						Total
	Surface water	Sand and gravel	Mississippian- Pennsylvanian	Silurian- Devonian	Cambrian- Ordovician	Total ground water	Surface water	Sand and gravel	Mississippian- Pennsylvanian	Silurian- Devonian	Cambrian- Ordovician	Total ground water	Total
Lake County Cont.													
04944N11E	0	0	0	.321	1.958	2.279	0	.211	0	.136	0	.347	2.626
04944N12E	14.026	.006	0	.008	0	.014	11.621	0	0	<.001	.054	.054	25.715
04945N09E	0	.615	0	0	0	.615	0	.037	0	0	.376	.413	1.028
04945N10E	0	.390	0	.793	1.606	2.790	0	0	0	.002	0	.002	2.793
04945N11E	0	.231	0	.014	.913	1.158	0	0	0	0	.108	.108	1.268
04945N12E	9.663	0	0	0	0	0	496.769	0	0	0	0	0	506.433
04946N09E	0	.083	0	0	0	.083	0	0	0	.424	0	.424	.507
04946N10E	0	.901	0	0	0	.901	0	0	0	0	0	0	.901
04946N11E	0	0	0	<.001	.008	.008	0	0	0	0	0	0	.008
04946N12E	0	.033	0	.062	.282	.377	1169.863	.001	0	0	0	.001	1170.241
04946N13E	2.030	0	0	0	0	0	0	0	0	0	0	0	2.030
Total	34.295	4.028	0	2.339	8.292	14.660	1678.260	.519	0	.591	1.143	2.253	1729.472
Mc Henry County													
05643N05E	0	0	0	0	0	0	0	0	0	.007	0	.007	.007
05643N06E	0	.086	0	.003	0	.089	0	.004	0	.004	0	.008	.097
05643N07E	0	.352	0	.027	0	.380	0	.013	0	0	0	.013	.393
05643N08E	0	.524	0	.717	2.276	3.516	2.795	.002	0	.010	.001	.013	6.324
05643N09E	0	0	0	.317	0	.317	0	0	0	0	0	0	.317
05644N05E	0	.443	0	0	0	.443	0	.005	0	0	.127	.132	.575
05644N06E	0	0	0	0	0	0	0	<.001	0	0	0	<.001	<.001
05644N07E	0	.425	0	0	0	.425	3.726	.024	0	1.734	0	1.759	5.910
05644N08E	0	.037	0	.124	.553	.713	0	.187	0	.133	0	.320	1.033
05644N09E	0	.060	0	.020	0	.080	0	0	0	0	0	0	.080
05645N05E	0	.005	0	0	0	.005	0	0	0	0	0	0	.005
05645N06E	0	.003	0	.011	0	.013	0	<.001	0	0	<.001	<.001	.024
05645N07E	0	1.861	0	0	0	1.861	0	0	0	0	0	0	1.861
05645N08E	0	.688	0	.887	0	1.574	.001	.004	0	.284	.831	1.119	2.694
05645N09E	0	.011	0	.305	0	.316	0	.010	0	<.001	.001	.011	.327
05646N05E	0	.637	0	0	0	.637	0	0	0	<.001	.164	.165	.801
05646N07E	0	.130	0	0	0	.130	0	.001	0	0	0	.001	.131
05646N08E	0	.071	0	.190	.099	.361	0	.473	0	0	0	.473	.834
05646N09E	0	0	0	0	0	0	0	.002	0	0	0	.002	.002
Total	0	5.332	0	2.601	2.928	10.861	6.552	.725	0	2.173	1.124	4.022	21.415
Will County													
09932N09E	0	0	0	.012	.387	.399	.001	0	0	0	.019	.019	.419
09932N10E	0	0	0	0	.006	.006	0	0	0	0	.005	.005	.011
09933N09E	0	0	0	.001	.526	.527	0	0	0	0	0	0	.527
09933N10E	0	0	0	0	0	0	0	0	0	0	.198	.198	.198
09933N12E	0	0	0	.339	0	.339	0	0	0	.006	0	.006	.345
09933N14E	0	0	0	.215	0	.215	0	0	0	.001	0	.001	.216
09934N09E	0	.018	0	0	.007	.026	10.562	0	0	.017	3.204	3.220	13.815
09934N10E	0	0	0	.073	0	.073	0	0	0	0	.401	.401	.475
09934N11E	0	0	0	.185	0	.185	0	.001	0	0	0	.001	.186
09934N13E	0	0	0	.828	0	.828	0	0	0	.056	0	.056	.883
09934N14E	0	0	0	.936	0	.936	0	0	0	.070	0	.070	1.006
09934N15E	0	0	0	.129	0	.129	0	0	0	0	0	0	.129
09935N09E	0	0	0	.275	2.055	2.330	0	0	0	.118	.129	.247	2.952
09935N10E	0	0	0	.411	5.166	5.577	1110.193	0	0	.359	4.083	4.442	1120.212
09935N11E	0	1.992	0	.648	2.070	4.710	0	0	0	.183	0	.183	4.892
09935N12E	0	.176	0	1.399	0	1.575	0	0	0	.082	0	.082	1.657
09936N09E	0	0	0	.326	.889	1.215	.252	.001	0	.001	0	.002	1.469
09936N10E	0	0	0	.783	2.205	2.987	91.726	0	0	.051	1.420	1.471	96.184
09936N11E	0	1.179	0	.865	.711	2.755	1414.521	0	0	0	0	0	1417.275
09937N09E	0	0	0	.008	0	.008	0	0	0	0	.014	.014	.022
09937N10E	0	0	0	4.805	.377	5.182	6.539	0	0	0	.206	.206	11.927
Total	0	3.366	0	12.237	14.399	30.002	2633.793	.001	0	.942	9.679	10.623	2674.800
Davenport-Rock Island-Moline(IL)													
Henry County													
03714N01E	0	0	0	0	.091	.091	0	0	0	0	0	0	.091
03714N02E	0	0	0	0	.079	.079	0	0	0	0	0	0	.079
03714N03E	0	0	0	.012	0	.012	0	0	0	0	0	0	.012
03714N04E	0	0	0	0	.502	.502	0	0	0	0	0	0	.502

Table 20. (Continued)

		Public					Self-supplied Industry					Total	
SMSA County Township and range	Surface water	Sand and gravel	Mississippian- Pennsylvanian	Silurian- Devonian	Cambrian- Ordovician	Total ground water	Surface water	Sand and gravel	Mississippian- Pennsylvanian	Silurian- Devonian	Cambrian- Ordovician	Total ground water	Total
Henry County Cont.													
03714N05E	0	0	0	.004	.825	.828	0	0	0	0	0	0	.828
03715N01E	0	0	0	.024	0	.024	0	0	<.001	0	0	<.001	.024
03715N02E	0	0	0	.037	0	.037	0	0	0	0	0	0	.037
03715N03E	0	0	0	0	.235	.235	0	0	.003	0	0	.003	.238
03715N05E	0	0	0	0	.566	.566	0	0	0	.030	0	.030	.596
03716N01E	0	0	0	.195	0	.195	0	0	0	0	0	0	.195
03716N02E	0	0	0	.012	0	.012	0	0	0	0	0	0	.012
03716N03E	0	0	0	.016	0	.016	0	0	0	0	0	0	.016
03716N05E	0	0	0	.079	0	.079	0	0	0	0	0	0	.079
03717N01E	0	0	.002	.463	0	.465	0	0	0	0	0	0	.465
03717N03E	0	.606	0	.004	0	.610	0	0	0	0	0	0	.610
03717N04E	0	.086	0	.156	0	.242	0	0	0	0	0	0	.242
03718N02E	0	0	0	.062	0	.062	0	0	0	0	0	0	.062
03718N03E	0	0	0	.079	0	.079	0	0	0	0	0	0	.079
Total	0	.692	.002	1.142	2.297	4.134	0	0	.003	.030	0	.033	4.167
Rock Island County													
08116N01W	0	0	0	.110	0	.110	0	0	0	0	0	0	.110
08116N02W	0	0	0	.095	0	.095	0	0	0	0	0	0	.095
08116N03E	0	0	0	.004	0	.004	0	0	0	0	0	0	.004
08116N03W	0	0	0	.101	0	.101	0	0	0	0	0	0	.101
08116N04W	0	0	0	.004	0	.004	0	0	0	0	0	0	.004
08117N01E	0	0	0	.094	.034	.129	0	0	0	0	.009	.009	.138
08117N01W	0	0	0	.293	0	.293	0	0	0	<.001	.004	.005	.297
08117N02W	0	0	0	.224	.580	.804	.330	0	0	.128	0	.128	1.263
08117N03W	0	0	0	.100	0	.100	0	0	0	0	0	0	.100
08117N04W	0	0	0	.003	0	.003	0	0	0	0	0	0	.003
08118N01E	0	.003	0	.534	.321	.858	7.944	0	0	.005	1.988	1.994	10.796
08118N01W	10.985	0	0	0	0	0	1.801	.009	0	.059	.010	.078	12.864
08118N02E	0	0	0	.002	0	.002	0	0	0	1.037	0	1.037	1.039
08118N02W	7.285	0	0	0	0	0	802.666	0	0	.003	0	.003	809.954
08119N01E	0	0	0	.118	0	.118	0	0	0	0	0	0	.118
08119N02E	0	0	0	.014	0	.014	0	0	0	0	0	0	.014
08119N03E	0	0	0	.015	0	.015	0	0	0	0	0	0	.015
08120N02E	0	0	0	.078	0	.078	.329	6.027	0	.186	0	6.214	6.620
Total	18.270	.003	0	1.787	.936	2.726	813.070	6.037	0	1.419	2.012	9.467	843.533
Decatur													
Macon County													
05814N01E	0	.093	0	0	0	.093	0	0	0	0	0	0	.093
05815N01E	0	.039	0	0	0	.039	0	0	0	0	0	0	.039
05815N02E	0	.066	0	0	0	.066	0	0	0	0	0	0	.066
05816N01E	0	.091	0	0	0	.091	0	0	0	0	0	0	.091
05816N01W	0	.063	0	0	0	.063	0	0	0	0	0	0	.063
05816N02E	15.549	.027	0	0	0	.027	0	0	0	0	0	0	15.576
05816N03E	7.774	0	0	0	0	0	7.488	0	0	0	0	0	15.262
05817N01E	0	.111	0	0	0	.111	0	0	0	0	0	0	.111
05817N02E	0	.102	0	0	0	.102	0	0	0	0	0	0	.102
05817N03E	0	.166	0	0	0	.166	0	0	0	0	0	0	.166
05817N04E	0	.081	0	0	0	.081	0	0	0	0	0	0	.081
05818N02E	0	.143	0	0	0	.143	0	0	0	0	0	0	.143
05818N03E	0	.055	0	0	0	.055	0	0	0	0	0	0	.055
Total	23.323	1.038	0	0	0	1.038	7.488	0	0	0	0	0	31.849
Kankakee													
Kankakee County													
04629N12W	0	0	0	.159	0	.159	0	0	0	0	0	0	.159
04629N13W	0	0	0	.003	0	.003	0	0	0	0	0	0	.003
04629N14W	0	.064	0	0	0	.064	0	0	0	0	0	0	.064
04630N09E	0	0	0	.023	.021	.044	0	0	0	0	0	0	.044
04630N10E	0	0	0	.133	0	.133	0	0	0	0	0	0	.133
04630N12W	0	0	0	.008	0	.008	0	0	0	0	0	0	.008
04630N13W	10.075	.023	0	.113	0	.135	0	0	0	0	0	0	10.210
04630N14E	0	0	0	.040	0	.040	0	0	0	0	0	0	.040
04630N14W	0	0	0	.018	0	.018	0	0	0	0	0	0	.018

Table 20. (Continued)

SMSA County Township and range	Public						Self-supplied Industry						Total
	Surface water	Sand and gravel	Mississippian- Pennsylvanian	Silurian- Devonian	Cambrian- Ordovician	Total ground water	Surface water	Sand and gravel	Mississippian- Pennsylvanian	Silurian- Devonian	Cambrian- Ordovician	Total ground water	Total
Kankakee County Cont.													
04631N11E	0	0	0	.049	0	.049	0	0	0	.054	0	.054	.103
04631N12E	0	0	0	.190	0	.190	0	0	0	.079	0	.079	.268
04631N13E	0	0	0	.494	0	.494	0	0	0	.060	0	.060	.554
04631N14E	0	0	0	.016	0	.016	0	0	0	0	0	0	.016
04632N12E	0	0	0	.346	0	.346	0	0	0	0	0	0	.346
04632N13E	0	.003	0	0	0	.003	0	0	0	0	0	0	.003
04632N14E	0	0	0	.036	0	.036	0	0	0	0	0	0	.036
Total	10.075	.089	0	1.627	.021	1.736	0	0	0	.192	0	.192	12.004
Peoria													
Peoria County													
07207N06E	0	0	0	0	.137	.137	0	0	0	0	0	0	.137
07207N07E	0	0	.009	0	0	.009	327.531	.604	0	0	0	.604	328.144
07208N05E	0	0	0	.018	0	.018	0	<.001	0	0	0	<.001	.018
07208N06E	0	0	0	0	.102	.102	0	0	0	0	0	0	.102
07208N07E	.058	.283	0	0	0	.283	0	0	0	0	0	0	.341
07208N08E	0	6.800	0	0	0	6.800	18.736	4.688	0	0	0	4.688	30.224
07209N05E	0	0	0	0	.159	.159	.575	.004	0	.001	0	.005	.740
07209N08E	6.631	7.505	0	0	0	7.505	2.132	.599	0	0	0	.599	16.867
07210N05E	0	0	.005	0	.055	.060	0	0	0	0	0	0	.060
07210N06E	0	0	.021	0	.005	.026	0	0	0	0	0	0	.026
07210N07E	0	.007	0	0	0	.007	0	0	0	0	0	0	.007
07210N08E	0	.073	0	0	0	.073	0	1.492	0	0	0	1.492	1.565
07210N09E	0	.023	0	0	0	.023	0	.001	0	0	0	.001	.024
07211N06E	0	0	0	0	.396	.396	0	0	0	0	0	0	.396
07211N07E	0	0	0	0	0	0	0	.001	0	0	0	.001	.001
07211N08E	0	.033	0	0	.014	.047	0	0	0	0	0	0	.047
07211N09E	0	1.001	0	0	0	1.001	0	0	0	0	0	0	1.001
Total	6.689	15.724	.035	.018	.868	16.645	348.974	7.389	0	.001	0	7.390	379.699
Tazewell County													
09002N05W	0	0	0	0	0	0	0	.002	0	0	0	.002	.002
09022N02W	0	.026	0	0	0	.026	0	0	0	0	0	0	.026
09022N04W	0	.203	0	0	0	.203	0	0	0	0	0	0	.203
09023N02W	0	.138	0	0	0	.138	0	0	0	0	0	0	.138
09023N03W	0	.043	0	0	0	.043	0	0	0	0	0	0	.043
09023N04W	0	.018	0	0	0	.018	0	0	0	0	0	0	.018
09023N05W	0	.044	0	0	0	.044	0	0	0	0	0	0	.044
09024N02W	0	.177	0	0	0	.177	0	0	0	0	0	0	.177
09024N03W	0	.221	0	0	0	.221	0	0	0	0	0	0	.221
09024N05W	0	3.304	0	0	0	3.304	44.436	5.073	0	0	0	5.073	52.814
09025N02W	0	.056	0	0	0	.056	0	0	0	0	0	0	.056
09025N03W	0	2.189	0	0	0	2.189	0	.110	0	0	0	.110	2.299
09025N04W	0	.021	0	0	0	.021	0	0	0	0	0	0	.021
09025N05W	0	2.183	0	0	0	2.183	0	0	0	0	0	0	2.183
09026N02W	.316	.122	0	0	0	.122	0	0	0	0	0	0	.437
09026N03W	0	.851	0	0	0	.851	0	.080	0	0	0	.080	.931
09026N04W	0	3.280	0	0	0	3.280	58.798	.306	0	0	0	.306	62.384
Total	.316	12.874	0	0	0	12.874	103.234	5.572	0	0	0	5.572	121.996
Woodford County													
10225N01E	1.460	0	0	0	0	0	0	0	0	0	0	0	1.460
10225N01W	0	.032	0	0	0	.032	0	.003	.001	0	0	.004	.036
10225N02W	0	.053	0	0	0	.053	0	0	0	0	0	0	.053
10226N01E	0	.057	0	0	0	.057	0	0	0	0	0	0	.057
10226N02E	0	.331	0	0	0	.331	0	0	0	0	0	0	.331
10226N02W	0	.027	0	0	0	.027	0	0	0	0	0	0	.027
10227N01W	0	.212	0	0	0	.212	0	0	0	0	0	0	.212
10227N02W	0	0	0	0	0	0	0	<.001	0	0	0	<.001	<.001
10227N03W	0	.551	0	0	0	.551	0	0	0	0	0	0	.551
10227N04W	0	.007	0	0	0	.007	0	0	0	0	0	0	.007
10228N01E	0	.025	0	0	0	.025	0	0	0	0	0	0	.025
10228N02E	0	0	0	0	.179	.179	0	0	0	0	0	0	.179
10228N02W	0	.110	0	0	0	.110	0	0	0	0	0	0	.110
Total	1.460	1.407	0	0	.179	1.586	0	.003	.001	0	0	.004	3.050

Table 20. (Continued)

SMSA County Township and range	Public						Self-supplied Industry						Total
	Surface water	Sand and gravel	Mississippian- Pennsylvanian	Silurian- Devonian	Cambrian- Ordovician	Total ground water	Surface water	Sand and gravel	Mississippian- Pennsylvanian	Silurian- Devonian	Cambrian- Ordovician	Total ground water	Total
Rockford													
Boone County													
00443N03E	0	0	0	.009	.026	.035	0	.013	0	0	0	.013	.048
00443N04E	0	0	0	0	<.001	<.001	0	<.001	0	0	.005	.005	.005
00444N03E	0	.599	0	0	2.523	3.122	.137	0	0	0	.299	.299	3.557
00444N04E	0	0	0	0	0	0	0	0	0	0	.209	.209	.209
00445N03E	0	.058	0	.028	0	.085	0	0	0	0	0	0	.085
00445N04E	0	.067	0	0	.068	.135	0	.025	0	0	0	.025	.159
Total	0	.724	0	.037	2.616	3.377	.137	.038	0	0	.513	.551	4.065
Winnebago County													
10126N10E	0	0	0	.004	0	.004	0	0	0	0	0	0	.004
10126N11E	0	0	0	0	.146	.146	0	<.001	0	0	.001	.001	.147
10127N10E	0	0	0	0	.472	.472	0	0	0	0	0	0	.472
10127N11E	0	0	0	0	0	0	0	.002	0	0	0	.002	.002
10128N10E	0	0	0	0	.186	.186	0	0	0	0	0	0	.186
10128N11E	0	0	0	0	0	0	0	0	0	0	.008	.008	.008
10143N01E	0	3.938	0	0	.040	3.978	0	1.182	0	.015	0	1.197	5.175
10143N02E	0	0	0	.027	.707	.734	0	.001	0	.001	.001	.003	.737
10144N01E	0	4.002	0	.005	5.502	9.509	0	.865	0	0	1.981	2.845	12.354
10144N02E	0	4.227	0	0	8.764	12.991	0	1.426	0	0	.457	1.882	14.873
10145N01E	0	1.158	0	.003	.006	1.167	0	0	0	0	.011	.011	1.178
10145N02E	0	1.469	0	0	.548	2.017	0	.002	0	0	0	.002	2.019
10146N01E	0	.337	0	0	.187	.524	600.000	.056	0	0	.025	.081	600.605
10146N02E	0	.051	0	0	.520	.571	.005	.476	0	.005	.001	.481	1.058
Total	0	15.182	0	.039	17.078	32.300	600.005	4.009	0	.021	2.484	6.514	638.819
St. Louis													
Clinton County													
01401N01W	0	0	0	0	0	0	.004	.005	.043	.168	0	.216	.220
01401N03W	0	.025	0	0	0	.025	0	0	.009	0	0	.009	.033
01401N04W	0	.063	.008	0	0	.071	0	.207	0	0	0	.207	.279
01401N05W	0	.054	.002	0	0	.057	.900	.090	.023	.058	0	.171	1.127
01402N01W	0	0	0	0	0	0	0	0	.017	.002	0	.020	.020
01402N02W	.576	0	0	0	0	0	0	0	0	0	0	0	.576
01402N03W	.501	0	0	0	0	0	0	0	0	0	0	0	.501
01402N04W	0	.062	0	0	0	.062	.501	0	0	.016	0	.016	.579
01403N02W	.032	0	0	0	0	0	0	0	0	0	0	0	.032
01403N03W	0	0	0	0	0	0	0	0	.021	0	0	.021	.021
Total	1.109	.204	.011	0	0	.215	1.405	.303	.112	.244	0	.659	3.387
Madison County													
06003N06W	0	.002	.028	0	0	.029	0	.014	0	.049	0	.063	.092
06003N08W	0	3.672	0	0	0	3.672	0	0	0	0	0	0	3.672
06003N09W	0	.045	0	0	0	.045	0	3.372	0	0	0	3.372	3.418
06003N10W	0	0	0	0	0	0	63.790	4.323	0	0	0	4.323	68.113
06004N05W	.802	0	0	0	0	0	0	0	0	0	0	0	.802
06004N06W	0	.033	0	0	0	.033	0	0	0	.035	0	.035	.067
06004N09W	0	2.432	0	0	0	2.432	0	.788	0	0	0	.788	3.220
06004N10W	33.445	0	0	0	0	0	0	0	0	0	0	0	33.445
06005N06W	0	.101	.008	0	0	.109	0	0	0	0	0	0	.109
06005N09W	0	3.563	0	0	0	3.563	278.821	59.016	0	0	0	59.016	341.400
06005N10W	11.412	0	0	0	0	0	0	0	0	0	0	0	11.412
06006N06W	0	.052	0	0	0	.052	0	.001	.018	0	0	.019	.071
06006N07W	0	.047	0	0	0	.047	0	0	0	0	0	0	.047
06006N08W	.111	0	0	0	0	0	0	0	0	0	0	0	.111
06006N10W	0	0	0	0	0	0	0	<.001	0	0	0	<.001	<.001
Total	45.769	9.946	.036	0	0	9.982	342.611	67.515	.018	.084	0	67.616	465.978
Monroe County													
06702S10W	.434	0	0	0	0	0	0	0	0	0	0	0	.434
06703S09W	0	0	0	.005	0	.005	.001	0	.001	0	0	.001	.006
06703S11W	0	.037	0	0	0	.037	0	0	0	0	0	0	.037
06704S11W	0	.010	0	0	0	.010	0	0	0	0	0	0	.010
Total	.434	.048	0	.005	0	.052	.001	0	.001	0	0	.001	.488

Table 20. (Concluded)

Public							Self-supplied Industry						Total
SMSA County	Surface water	Sand and gravel	Mississippian- Pennsylvanian	Silurian- Devonian	Cambrian- Ordovician	Total ground water	Surface water	Sand and gravel	Mississippian- Pennsylvanian	Silurian- Devonian	Cambrian- Ordovician	Total ground water	Total
Township and range													
St. Clair County													
08201N07W	0	.003	0	0	0	.003	0	0	0	0	0	0	.003
08201N10W	0	0	0	0	0	0	.219	0	0	0	0	0	.219
08201S06W	1.492	0	0	0	0	0	0	0	0	0	0	0	1.492
08201S07W	0	0	0	0	0	0	.028	0	0	0	0	0	.028
08201S08W	0	0	<.001	0	0	<.001	0	0	0	0	0	0	<.001
08201S09W	0	0	.002	0	0	.002	0	0	0	0	0	0	.002
08202N07W	0	.001	0	0	0	.001	0	0	0	0	0	0	.001
08202N09W	0	.110	0	0	0	.110	0	9.550	0	0	0	9.550	9.659
08202N10W	19.324	0	0	0	0	0	0	2.506	0	0	0	2.506	21.829
08202S06W	0	.067	0	0	0	.067	0	<.001	0	0	0	<.001	.068
08202S07W	.502	0	0	0	0	0	0	0	0	0	0	0	.502
08202S08W	0	0	.003	0	0	.003	0	0	0	0	0	0	.003
08204S05W	0	0	0	0	0	0	.008	0	0	0	0	0	.008
Total	21.318	.181	.006	0	0	.187	.255	12.056	0	0	0	12.056	33.816
Springfield													
Menard County													
06517N06W	0	.146	0	0	0	.146	0	0	0	0	0	0	.146
06518N06W	0	.047	0	0	0	.047	0	0	0	0	0	0	.047
06518N07W	0	.062	0	0	0	.062	0	0	0	0	0	0	.062
06519N05W	0	.065	0	0	0	.065	0	0	0	0	0	0	.065
06519N06W	0	.074	0	0	0	.074	0	0	0	0	0	0	.074
06519N07W	0	.296	0	0	0	.296	0	0	0	0	0	0	.296
06519N08W	0	.015	0	0	0	.015	0	0	0	0	0	0	.015
Total	0	.704	0	0	0	.704	0	0	0	0	0	0	.704
Sangamon County													
08414N07W	.048	0	0	0	0	0	0	0	0	0	0	0	.048
08415N03W	0	.054	0	0	0	.054	.894	0	0	0	0	0	.948
08415N05W	0	0	0	0	0	0	249.140	0	0	0	0	0	249.140
08415N07W	.067	0	0	0	0	0	0	0	0	0	0	0	.067
08416N02W	0	.711	0	0	0	.711	0	0	0	0	0	0	.711
08416N03W	0	.054	0	0	0	.054	0	0	0	0	0	0	.054
08416N04W	0	.416	0	0	0	.416	.533	0	0	0	0	0	.949
08416N05W	22.264	.006	0	0	0	.006	0	0	0	0	0	0	22.269
08416N06W	0	.255	0	0	0	.255	0	0	0	0	0	0	.255
08417N06W	0	.088	0	0	0	.088	0	0	0	0	0	0	.088
Total	22.379	1.585	0	0	0	1.585	250.567	0	0	0	0	0	274.530

Table 21. Water Withdrawals within SMSA's,
Estimated and Reported 1982

<i>SMSA's*</i>	<i>Public supply (mgd)</i>	<i>Self-supplied industry (mgd)</i>	<i>Rural (mgd)</i>	<i>Fish and wildlife (mgd)</i>	<i>Total</i>
Bloomington-Normal	11.138	.575	1.562	0	13.276
Champaign-Urbana- Rantoul	18.241	7.753	3.024	0	29.018
Chicago	1274.654	5265.954	48.157	.709	6589.474
Davenport-Rock Island-Moline(IL)	25.132	822.570	7.400	0	855.102
Decatur	24.361	7.488	1.385	0	33.235
Kankakee	11.811	.202	12.657	0	24.670
Peoria	39.570	465.175	11.308	.030	516.083
Rockford	35.677	607.207	8.035	.002	650.920
St. Louis(IL)	79.066	424.603	9.905	0	513.574
Springfield	24.667	250.567	2.075	0	277.310
<i>SMSA areas</i>	<i>1544.319</i>	<i>7852.093</i>	<i>105.510</i>	<i>.740</i>	<i>9502.661</i>
<i>non-SMSA areas</i>	<i>195.436</i>	<i>23363.617</i>	<i>160.389</i>	<i>26.184</i>	<i>23745.626</i>
State total	1739.755	31215.710	265.899	26.924	33248.287

Table 22. Water Withdrawals within SMSA's, Excluding
Electrical Power Generation, Estimated and Reported 1982

<i>SMSA's*</i>	<i>Public supply (mgd)</i>	<i>Self-supplied industry (mgd)</i>	<i>Rural (mgd)</i>	<i>Fish and wildlife (mgd)</i>	<i>Total</i>
Bloomington-Normal	11.138	.575	1.562	0	13.276
Champaign-Urbana- Rantoul	18.241	7.753	3.024	0	29.018
Chicago	1274.654	384.368	48.157	.709	1707.888
Davenport-Rock Island-Moline(IL)	25.132	20.020	7.400	0	52.522
Decatur	24.361	7.488	1.385	0	33.235
Kankakee	11.811	.202	12.657	0	24.670
Peoria	39.570	54.026	11.308	.030	104.933
Rockford	35.677	7.207	8.035	.002	50.920
St. Louis(IL)	79.066	98.066	9.905	0	187.038
Springfield	24.667	1.427	2.075	0	28.170
<i>SMSA areas</i>	<i>1544.319</i>	<i>581.132</i>	<i>105.510</i>	<i>.740</i>	<i>2231.699</i>
<i>non-SMSA areas</i>	<i>195.436</i>	<i>187.555</i>	<i>160.389</i>	<i>26.184</i>	<i>569.565</i>
State total	1739.755	768.687	265.899	26.924	2801.264

* Bloomington-Normal = McLean Co.
Champaign-Urbana-Rantoul = Champaign Co.
Chicago = Cook, DuPage, Kane, Lake, McHenry, & Will Co.
Davenport-Rock Island-Moline(IL) = Rock Island & Henry Co.
Decatur = Macon Co.

Kankakee = Kankakee Co.
Peoria = Peoria, Tazewell, & Woodford Co.
Rockford = Boone & Winnebago Co.
St. Louis(IL) = Clinton, Madison, Monroe, & St. Clair Co.
Springfield = Menard & Sangamon Co.

Figures may not add to totals because of independent rounding.